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The nature of art and a discussion of the importance of including art experiences in the school program are presented. The report also includes descriptions of programs that are in operation in various school systems to illustrate some of the possibilities inherent in the general recommendations.

The study of art gives the gifted student's education an aesthetic-emotional-expressional base in addition to the intellectual basis for his general education courses.

It is recommended that a one-year program in art be required of all academically talented students. Recommendations are made to guide in forming the content and method of the art program. Among these are: creativity, broad philosophic problems, sensitivity, techniques, and approach. Advanced courses are suggested for students with special abilities in art. There are many resources that can be used to improve the basic program.

The administrator can be of great assistance by aiding in the identification and guidance of the talented, properly staffing and equipping the art program, providing flexible and helpful scheduling for classes not exceeding 25, and providing whatever assistance is needed to make the program effective.

Three school systems have shown that a program relating the four arts can be effectively scheduled and provided on a limited budget.

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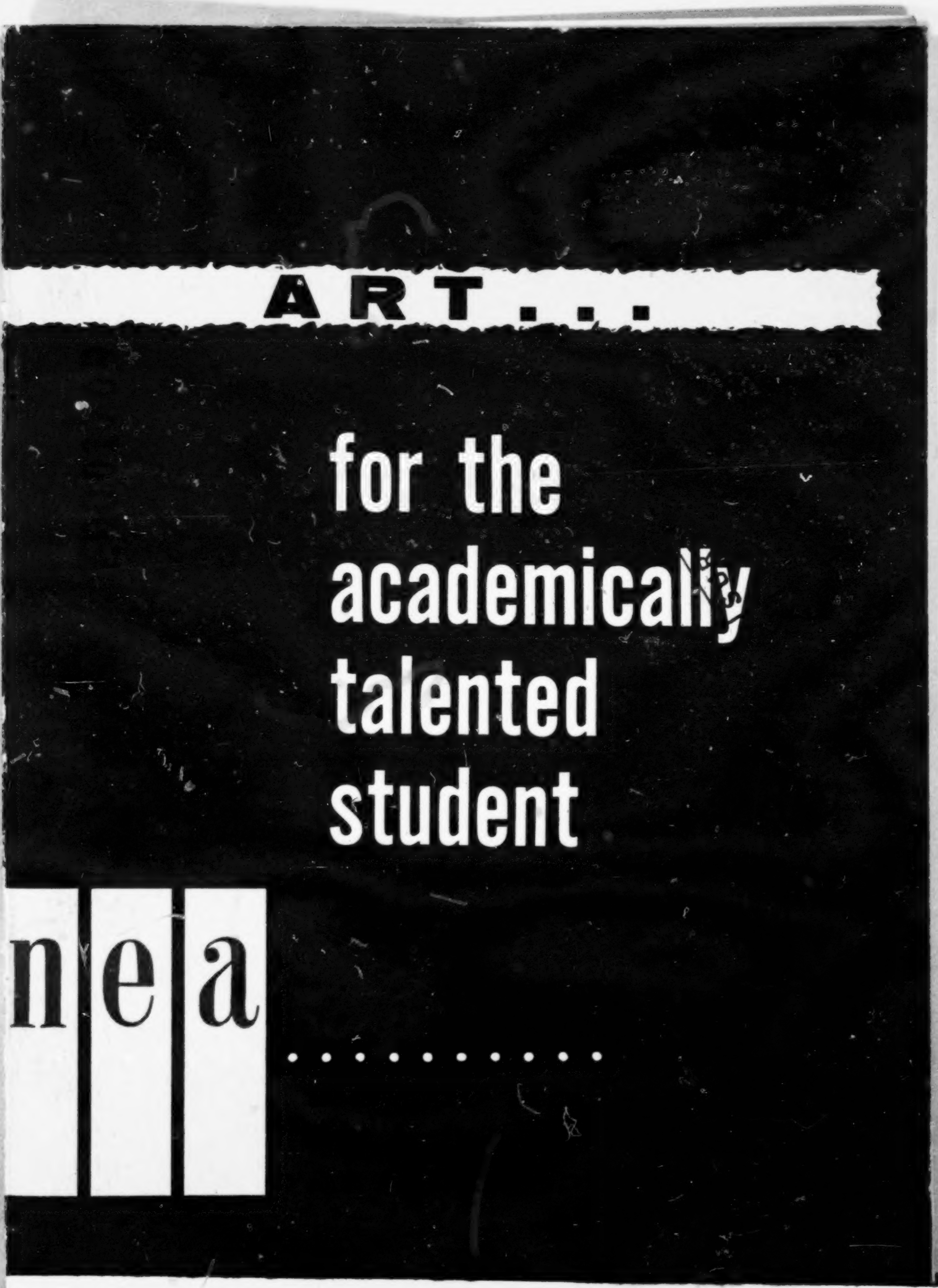

ART . . .

for the academically talented student

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ART

for the Academically Talented Student in the Secondary School

Editor:

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National Education Association Project on the Academically
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FOREWORD

Since October 1957, there has been an increased public interest in American education. Educators have always been interested in the quality of educational programs for all American youth, but recent world events have isolated certain concerns and spotlighted them for special attention. One of these special concerns is the program being provided for our most talented youth. The Academically Talented Student Project of the National Education Association is one effort designed to study the problems of adequate educational programs for talented students.

Under the Project program, a two and one-half day conference to consider art programs in the secondary school for able students was held in the National Education Association Center. It was organized in cooperation with the National Art Education Association, and 14 outstanding art educators participated in the discussions.

In previous publications the Project has examined several of the subject-matter fields of the secondary-school program. Art has always been an important part of man's activity, and it is as important for the non-artist as for the artist. One does not need to be talented in art to appreciate it and to benefit from its study. Thus art has always been an important part of the school program. It is fitting, therefore, that the Academically Talented Student Project should also examine programs in art for the able secondary-school student who may not be artistically talented.

The conference report examines the nature of art and discusses the importance of including art experiences in the school program for academically talented students. It also contains suggested activities for program planning, a list of selected references, and curriculum outlines of some experimental programs. The last will be extremely helpful in the evaluation of present course offerings and in the development of new ones.

The National Art Education Association became a department of the NEA in 1948. Two years ago it opened an office with an executive secretary in the new NEA Center. The conference reported here is the first of its type which the NAEA helped to sponsor, and it provides additional evidence of the leadership which this Association has shown in art education in the few short years of its existence.

This report will be extremely valuable to art teachers. In addition, it will be of great value to school superintendents, principals, guidance personnel, school board members, and all others interested in and responsible for the development of quality education in American schools.

LAWRENCE G. DERTHICK
Assistant Executive Secretary
for Educational Services, NEA

CONTENTS

Foreword 3

Conference Participants 6

Introduction 8

Part I

I. The Academically Talented Student 11

II. The Visual Arts in Education 15

III. Offerings in the Visual Arts 27

IV. Resources for the Visual Arts 49

V. Administrative Responsibilities 53

Part II

VI. Art in the Houston Public Schools 65

VII. Special Art Program in Pittsburgh 70

VIII. Related Arts Program in Hillsdale 88

Selected References 104

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September 24 - 26, 1959

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INTRODUCTION

This report is one of a series of publications on various aspects of the secondary-school program for academically talented students. Financed by the Carnegie Corporation of New York, it has been a major project of the National Education Association. Groups in various disciplines have undertaken reports in relation to their respective fields.

Plans for the preparation of this report were made by the National Art Education Association with the appointment of the Committee on Art for the Academically Talented Student. The Committee met in Washington, D.C., for a three-day period at which time basic issues of art for the academically talented student were discussed at length and a tentative outline for the report was prepared. The chairman then prepared a fuller outline which was sent to all members of the committee for their criticisms and suggestions. Following that, a writing committee of four persons was designated and a first draft was prepared. This, too, was sent to all the committee members, and their help was enlisted. Three members of the writing committee met for further work on the manuscript. At a later date, it again underwent considerable revision before reaching the final draft stage.

In preparing this report, it was clearly necessary to present a general argument for the visual arts as an essential in secondary education for academically talented students, along with recommendations as to desirable characteristics of such a program. This material comprises Part I of the report. It also seemed advisable to include descriptions of programs that are in operation in various school systems to illustrate some of the possibilities inherent in the general recommendations. Part II, therefore, is given over to materials from and descriptions of such undertakings in three school systems—Pittsburgh, Pennsylvania; Houston, Texas; and Hillsdale, New Jersey. These programs differ not only in what they are attempting to do but also in the way in which they are being conducted, and it is felt that they comprise a valuable part of the report. The individuals who prepared the material in Part II are listed as special contributors. Their assistance is gratefully acknowledged.

The Committee on Art for the Academically Talented Student is grateful to the Carnegie Corporation of New York and to the National Education Association for their interest and support in making available to educators in the United States a statement on the importance of art for academically talented students. It is also proud of its parent organization, the National Art Education Association, for the leadership it is exerting in this area. The Committee hopes that the product of its labors will be of benefit to talented adolescents in secondary schools throughout the country and to the great venture of education of which art is an integral part.

EDWIN ZIEGFELD
Chairman and Editor

The Academically Talented Student

Those students who score in the top 15 to 20 percent of the high-school population on intelligence tests, who have an IQ of 120 or over, and whose achievement test records indicate reading ability conspicuously beyond their age-grade level comprise the group of academically talented considered in this report. Most of them have a record of grades consistently and considerably above average and have either varied interests or intensive interest in some particular field. In addition, there are those students of high innate intelligence who, for various reasons, have failed to establish work habits which lead to academic success. These are the high IQ underachievers.

CHARACTERISTICS OF THE ACADEMICALLY TALENTED STUDENT

Most academically talented students are characterized by superior physical development and abundant energy. Their high intellectual abilities include, in varying degrees, the following qualities: speed of learning; retentive memory and excellent powers of recall; and the power to generalize and to think abstractly, to recognize likenesses and differences, to grasp the whole as well as parts, to have insight into problems, and to do problem solving. Especially for the achievers, verbal abilities such as ease and enjoyment in reading and writing, the ability to think in terms of language, and a vocabulary of both size and power are typical. In some instances numerical skill; spatial imagination; and extreme sensitivity to sound, to sight, or to movement are present. This last group also includes those students who have high potential as creators, as critics, or as connoisseurs in the arts, for, although intelligence tests make no pretense of measuring artistic ability, a positive relationship between intelligence as measured by intelligence tests and abilities in art has been proven.

While specifying some of the common characteristics of this group we must keep in mind that the individuals who comprise it are remarkably varied. There is a tendency, at least when setting the academic requirements of their schooling, to think of academically talented students as homogeneous. We have every right to insist that these students perform in a superior manner, for they have the capability to do so. We would fail in our responsibility to them if we did not require of them their best. But we must also keep in mind the great variation that exists among them and must be certain that, even more than for students of lesser abilities, we do not limit their educational experiences.

DESTINY OF THE ACADEMICALLY TALENTED FOR LEADERSHIP IN ALL FIELDS, INCLUDING ART

It is from the academically talented group, and primarily from the achievers, that leadership in all phases of American life will come. In the ranks of these students now in school are the future leaders in science, social affairs, industry, and the arts.

The requirements for leadership in the many facets of American culture are varied. Not only are ability and expertness required, but also needed are an originality and flexibility in approaching and solving the multiplicity of problems which emerge in a world undergoing such rapid change as ours. In addition, the remarkable complexity of our socioeconomic structure demands, for its continuance, that there be a considerable interdependence among its parts. Indeed, many of our ills, both educational and social, have been due to the fact that various areas and disciplines tend to get sealed off. For a healthy educational system, as well as for a healthy culture, the scientist must know something of art; the artist, something of politics; and the politician, something of history.

Leaders in the arts will be the creators—the architects, painters, sculptors, designers. They will also be those individuals who, through such responsibilities as the design of advertisements or of motion picture sets, or the styling of television shows or industrial products, become powerful molders of public taste.

It is the responsibility of education at all levels to discover the academically talented student and to help him develop to his maximum potential. Thus he will be enabled to assume the leadership of which he is capable and which our culture sorely needs.

THE DIVERSITY OF ART ABILITIES IN THE ACADEMICALLY TALENTED GROUP

Within the academically talented group will be found highly diverse abilities, both potential and developed, as well as varied interests and goals for adult life. This group includes the highly gifted as well as those of moderate and, occasionally, meager ability in art expression. Some potentially great talents will undoubtedly be found undeveloped, and not all students talented in art will wish to make it their professional career.

ABILITY OF ALL TO DEVELOP THROUGH EDUCATION IN THE VISUAL ARTS

Some students within the academically talented group will need specific instruction in art each year to lay a foundation for their future professional careers as architects, city planners, industrial designers, painters, or sculptors. But all students require an introduction to the cultural heritage in the broad field of visual art; they need personal and direct experiences in the artist's approach to thinking, feeling, and producing in order to achieve understanding of the arts as they will affect their lives.

NECESSITY FOR EDUCATION IN THE VISUAL ARTS FOR ACADEMICALLY TALENTED STUDENTS

Educational programs in the visual arts, therefore, must be provided both for students of high ability who have definite art career orientations and for those academically gifted students whose art study falls clearly within the area of general education. This latter group, because of their particular abilities, tend to be given a highly verbal education which involves only the intellect. They have need for education with an aesthetic-emotional-expressional basis, as well. While the arts involve the intellect, they are rooted in emotionally-based experience. All academically talented students profit from instruction in art involving abstract ideas and historical contexts as well as personal experience in appreciation and creation. Art courses for them have both intellectual and emotional-intuitive bases.

CHAPTER II

The Visual Arts in Education

THE SCOPE OF THE VISUAL ARTS IN EDUCATION

The visual arts include the whole of our man-made environment, from painting and sculpture to newspaper advertisements, from architecture and city planning to kitchen chairs, from books and magazine illustrations to the clothes we wear. Some art is on a high level; some, in need of improvement. To increase the attractiveness and expressiveness of the things in and the organization of our surroundings is the concern of the art educator and the artist.

It is important that the visual arts be seen as areas that constantly affect us all. Everyone sees art, makes judgments and selections of art products, and is affected by what he sees and the judgments and selections he makes. We cannot avoid these persuasive influences any more than we can live without breathing.

It is an unfortunate fact that, in a culture as rich as ours, we are willing to live and work in surroundings that are frequently devoid of artistic quality. This is a time of special and particular problems for the arts, and no intelligent discussion of art or art education today—its nature and its values—can omit a consideration of the current cultural context.

SOME CHARACTERISTICS OF OUR CULTURE

Current major forces, both in education specifically and in our society generally, tend to minimize or ignore the values and contributions of art. At the same time, these forces increase the importance of the very values which art can provide.

Dominance of Science and Technology

To a high degree both science and technology dominate our culture and, at present, much of our concern in education. The magnificent developments in these areas are among man's greatest triumphs, but an overconcern for science with its objectivity and technology, its efficiency and productivity, tends to make us ignore or suspect the subjective and spiritual aspects of life.

Concern with Materialism

We live in a highly materialistic and use-oriented society. One need only look at the towering skyscrapers, sprawling factories, and traffic-congested roads of any large city or at the advertisements in newspapers or magazines to realize the extent of our concern with the material and the functional. Merit is too frequently based on size, number, use, or comfort; it is all too infrequently based on qualitative factors.

A Time of Tension and Anxiety

It is a curious fact that, in spite of fantastic developments in communication, this is a time of great individual isolation and loneliness. The world and the universe have suddenly contracted, but men have been brought together more in suspicion and bitterness than in understanding. The fruits of science give promise of freeing us from much of the drudgery of life, but they also have confronted us with the threat of annihilation. This is an unprecedented time of tension and anxiety.

Loss of Individuality and Sense of Responsibility

Developments in mechanization have given us a standard of living that is the marvel of the world. But they have also reduced the worker from the role of a sensitive craftsman who faces many problems and who responds directly to the materials he shapes to the role of an automaton who repeats one or a few operations, who sees little or no relation between his task and the finished product, and whose contribution is so minor that he can have no pride of accomplishment. Work now is considered necessary only to enable one to live; for most people it has lost the ennobling and humanizing qualities it had when the worker could sense directly his effect on the material and could see that his judgment and skills were of value in shaping the product.

Pressures Toward Conformity

Strong trends toward conformity and uniformity are increasing in our culture. Developments in communication bring to millions of people identical printed material, musical programs, or theatrical presentations. The expense of production makes vast audiences essential; these in turn bring with them pressures for mediocrity of product. Complexity of structure, both social and mechanical, requires uniformity in conditions for operation. A failure of a valve can bring to a stop a gigantic machine; a strike of a small group of workers can immobilize an entire city. Pressures against deviation or irregularity are enormous; no one is free of them.

Longer Life and Leisure Time

On the more positive side, this age of science is giving us not only greater length of life, but also more free time in each of our days to do with as we please. How we are to use this time—whether for antisocial, destructive, and petty, or beneficial, ennobling, and constructive purposes—is one of our great current problems.

It would appear, then, that the science-dominated world of today is a paradox. While bringing the earth's people face to face, while collapsing time and space, science has achieved an amazing schism between its world and the world of humanity which is being transformed by that science. It has created great uncertainty and fear, a sense of spiritual isolation in the midst of physical proximity. It has tended to dehumanize man by making him over in the image of the machine he operates. It has developed a futile passivity on the part of man, a willingness to be machine-fed his culture, sports, and entertainment. The vast stretches of suburban sameness envelop him. The average citizen today feels himself a passive world spectator, a robot to the forces and things he has created.

Every culture has crises, but our culture is an exception in the number, complexity, urgency, and frequency of those that face it. In meeting these difficulties, education must take the lead. Cultural crises are also educational crises. It is suggested here that many of our current difficulties are brought about or are intensified by an imbalance between scientific and humanistic concerns.

It is the view of this publication that in a vigorous and "healthy" society there must be a balance between concerns for the body and the spirit, the emotions and the intellect, the objective and the subjective, the material and nonmaterial. Only through the balance of these basically opposing factors can the richness and varied nature of life be experienced. Only through a balance can the excesses which lead to grossness, insensitivity, and brutality on the one hand, or asceticism and withdrawal on the other, be avoided. Either extreme carries with it disastrous personal and social consequences.

THE VALUES OF THE VISUAL ARTS IN EDUCATION

Before making recommendations regarding the nature of art experiences for the academically talented student, it is necessary to look at the values which they provide. In character they are unique and essential, both for the culture and for individuals. The values also are many, and only the most significant can be looked at here. They will be discussed in the following paragraphs as they reside in the nature of art, in the art process, and in the resulting product.

Values Deriving from the General Nature of Art

The general nature of the visual arts determines to a considerable degree the values which derive from them. Most obvious is the fact that they are visual, and, therefore, involve a large part of the environment of all sighted people. We are surrounded by the products of the visual arts and are affected by them. Our reactions are all the more real for our not even being conscious of them. A simple example can be cited of a restaurant whose patrons kept complaining of the cold in the green dining room. The room was painted yellow and, although the temperature of the room remained the same, the complaints ceased. Changing the room from a "cool" to a "warm" color had greater effect than the actual temperature.

More important, however, is the fact that the visual arts spring from human experience. Although they may, in many of their manifestations, serve functional needs, their aesthetic value is rooted in feelings and emotions. In the visual arts, as in any art, man's hopes, ideals, sufferings, anxieties, aspirations, and delights are given expression. Even a superficial student of history knows that the arts give us deep insight into any culture. Indeed, in many instances it is only through its artifacts that a particular culture is known to us. Because the art expressions of a period constitute so accurate a statement of the values and behaviors of a people, we can literally reconstitute a culture on the basis of them. In the same manner, the art products of a particular student are statements about him. In both instances they are the results of human needs; they are expressions of human aspirations; they are statements of the human condition.

But these arts give us more than a visual record; they speak of qualities, both ordered and rhythmic, that calm or stir us. They have a particular and vivid selectiveness that imparts the feeling both of the artist and of his age and people. Primitive rituals and beliefs become understandable through totems, fetishes, and idols; refinement and opulence are conveyed by means of rich brocades and delicate porcelains. The rise of new cultures and the exhaustion of declining ones are perceivable in buildings and paintings.

Another important general characteristic that needs comment relates to the experiential bases of the visual arts. It is, to use Brinton's useful distinction,[1] that they are noncumulative, as opposed to such fields as mathematics and the sciences which are cumulative in their content. This is not to say that one is more important than another, merely that they are different and do different things.

The ancients were concerned with the sciences as well as the arts. In the former we can readily say that subsequent developments have built on the discoveries of the ancients and that tremendous progress has been made, both in knowledge and achievements, beyond their accomplishments. Scientific knowledge has accumulated very much like building stones in a wall; it is at the outer edges of scientific knowledge that advances take place.

In the arts, however, we are concerned basically with the same problems as were the ancients and the people of every age. What is the nature of reality, of beauty? What is the nature of man? What are his hopes, his aspirations, his values? To questions such as these, artists of every generation have addressed themselves with significant and differing results. But whereas recent developments in science can only be understood after an individual *knows* the relevant accumulated knowledge, in art the aesthetic qualities of the products of any period can be comprehended directly. This is not to say that some knowledge of a particular period of art is not helpful as a *bridge* to understanding. It is clearly that. But the art expressions of any person or period are direct human statements rooted in the spirit and ideas of the artist and his times.

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[1] Brinton, Clarence Crane. *Ideas and Men.* New York: Prentice-Hall, 1950. 587 p.

If this distinction is accepted and understood, all manner of particular and unique problems of education in the creative arts take on a new light and a new meaning. It makes clear that creativity, which increasingly has become the concern of education, is possible in the visual arts for any person, no matter how young, who draws directly on his experience. Creativity is not possible in the sciences, however, until one has mastered the basic knowledge of the particular field in which he is working. This distinction also explains why standards of quality are difficult, and at times impossible, to establish, depending as they do on inner and subjective factors rather than outer and objective ones. It shows why sequences of learning and experiences, so demonstrable in the sciences and mathematics, are not possible to establish in the visual arts. For example, it is not possible to learn long division before having mastered multiplication and subtraction, yet both kindergarten children and professional artists draw the human figure. In fact, this is one of the first things young people draw, and it is their favorite subject. There is no comparison, of course, between the skill of a mature artist and a young child in what they draw. But the point is that in art the most difficult of subjects can be undertaken at the simplest of levels. While the drawings of figures by a young child will have many technical faults and limitations, they still may be very expressive. Or put another way, a person does not learn to draw a book in one grade, a chair in the next, a house after that. With intelligent perception and the physical ability to handle materials, any subject can be attempted. What a person chooses to draw, and the order in which he draws a series of objects, depends on personal and subjective factors. In education in the visual arts, except for technical processes and the history of art, the best bases of sequence of activities are found within the individual student. It is quite true that in many art classes a sequence of activities is established by the teacher who bases it upon student interests and needs as he sees them. But even here, the nature and sequence of the activities have a highly personal basis—and rightly so.

Values Deriving from the Processes of Art

Certain values in the visual arts derive clearly from process, from the activity itself. Inasmuch as the visual arts draw upon one's experiences, the individual is required to confront himself—to choose, to reorganize, to integrate. At the very least he deals with things which interest and have meaning for him; he may also, through this confrontation, make discoveries about himself and/or give expression to deep-seated emotional concerns which he cannot or will not verbalize, or of which he is unaware. He will always make value judgments through the selection, statement, and reorganization of his experiences in some art form.

Inventiveness, imagination, creativity—all are essentials of the successful art experience. These are particularly apparent in the art process because the range of acceptable and "right" solutions is infinite; for example, there is no "right" way to depict the human figure. It has been depicted in hundreds of cultures and by tens of thousands of artists and always differently. It is, furthermore, a subject of interest to the preschool child, the adolescent, and the adult; at each level, and within each level, it is depicted differently.

The visual arts, furthermore, provide for direct experiences with materials in activities which demand emotional direction, intellectual guidance, and manipulative skill. There is a directness of relationship between one's efforts and one's results, a degree and kind of control that are unique.

Values Deriving from the Art Product

Art is a productive activity; a product results from the experience. Successful art products are characterized by integrity and sincerity; these are factors of evaluation along with aesthetic order and craftsmanship. Under effective art instruction, the work of every student is unique and, in this age of threatening conformity, few outcomes can be more highly prized. Furthermore, because of the nature of the involvement of every student, there is something of himself in what he produces; this is responsible for the intense satisfaction which results and the sense of pride and accomplishment which accrues. In the words of the late Lyman Bryson, art activities give one a sense of power—"power in the best, not an evil, sense; not the power that corrupts, but the power that exults."[2]

Lastly, in both process and product, the creator is sensitized to the values inherent in the art products of others. Because art is nondiscursive, many of its values are not susceptible to verbal discussion or treatment. One can talk about how a cathedral affects him, but a verbal description can convey only a part of one's total reaction. The same thing is true of reactions to a painting, a dance performance, or a concert.

One of the great problems in art education is sensitizing persons to forms which are new to them. The reason for the existence of the great culture lag in our society is the general tendency to reject new art forms. In fact, almost without exception, the great artists of the last two centuries have all been subjected to prolonged and bitter attack and rejection. Vincent Van Gogh, now a recognized giant of modern art, sold only two paintings in his lifetime. The effect of the rejection by the general public of contemporary art works is that people never are able to enjoy the art of the period of history in which they are living, and those are the works of art which should speak to them most forcefully. In fact, the appreciation which a layman brings to art of, say, Classical Greece or Renaissance Italy may be no more than an unfeeling acceptance of the verdict of history on the merits of these works.

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[2] Bryson, Lyman. "Art and Integrity." *Eastern Arts Bulletin* 13:12; April 1956.

There is considerable evidence, mostly empirical (for these things do not lend themselves to objective investigation), that the best way to intelligent understanding in art is through direct participation. Ceramics becomes a lively field if one "throws" pots on a potter's wheel; abstract painting becomes meaningful after an individual has himself worked through the process of abstracting an object; one "sees" a chair or a tree by drawing or painting it; a person becomes sensitive to such elements as forms, colors, and relationships in his own product and thereby also becomes aware of and capable of appreciating similar forms, colors, and relationships in the work of others.

THE NECESSITY OF EXPERIENCES IN THE VISUAL ARTS

Quite clearly, education in the visual arts is an essential for academically talented students. This is shown by the many values implicit in the visual arts, many of which have a particular relevancy for these times. The fact that art is basically nonmaterialistic and to be enjoyed only for its own sake is a concept of great educational worth in a materialistic age. In a time when all individuals are subjected to great pressures for conformity, the visual arts, with their infinite and largely unique opportunities for individual expression, take on a new educational urgency. Pride in selfhood is essential to anyone's sense of dignity and worth; the arts remain as one of the few areas where uniqueness not only is prized, but is basic. In this age of passivity, the visual arts demand intense and personal involvement.

It is chiefly because of the visual arts' functions of humanizing and creating values that they are essential. They deal with ultimate values, with the nature of good and of evil and the meaning of life. They are concerned, not with things and events, but with the meanings of things and events. It is chiefly the artists (and not only those in the visual arts) who have protested the dehumanizing effects of the machine and who have portrayed with insight and terror its effects on us. All the humanizing values of a society do not, of course, come from the arts. With other values-sources less potent in our society than previously, however, the arts assume a position of central importance both in society and in education.

Einstein has written eloquently on the inability of science to provide values.

> For the scientific method can teach us nothing else beyond how facts are related to, and conditioned by, each other. The aspiration toward such objective knowledge belongs to the highest of which man is capable, and you will certainly not suspect me of wishing to belittle the achievements and the heroic efforts of man in this sphere. Yet it is equally clear that knowledge of what *is* does not open the door directly to what *should be*. One can have the clearest and most complete knowledge of what *is*, and yet not be able to deduct from that what should be the *goal* of our human aspirations. Objective knowledge provides us with powerful instruments for the achievements of certain ends, but the ultimate goal itself and the longing to reach it must come from another source. And it is hardly necessary to argue for the view that our existence and our activity acquire meaning only by the setting up of such a goal and of corresponding values. The knowledge of truth as such is wonderful, but it is so little capable of acting as a guide that it cannot prove even the justification and the value of the aspiration toward that very knowledge of truth.[3]

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[3] Department of Research and Education, Federal Council of the Churches of Christ in America. *Information Service* 18:1; No. 22, 1939. As quoted in Counts, George S. *Education and American Civilization*. New York: Teachers College, Columbia University, 1952. p. 257-58.

It is significant that one of our very great technical institutes has itself become aware of the need for training in the visual arts and of their values "in the growth of individuals and, through them, of society at large"[4] and states its belief in approaching "the intellect through the senses."[5]

In view of the major forces and pressures in our culture, the present imbalance in education, and the particular values which inhere in the visual arts, *it is essential that all academically talented students have guided experiences in the visual arts.* Basically, they cannot be educated without them.

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[4] Committee for the Study of the Visual Arts at the Massachusetts Institute of Technology. *Art Education for Scientist and Engineer.* Report of the Committee. Cambridge: Massachusetts Institute of Technology, 1957. p. 8.

[5] *Ibid,* p. 10.

CHAPTER III

Offerings in the Visual Arts

It is recommended that a *one-year course* in art be required of all academically talented students. This might be offered in any year from the ninth to the twelfth grade. If given during one of the first two years, the course would enable those students with particular interest in art to pursue it further; if given during one of the last two years, the students would be maturer and would profit more from it. The exact placement might well differ from one school to another. At any grade level, however, the course would be of a nature to have general appeal and compelling values.

The field of art for the academically talented student is broad and varied—from three-dimensional organization of space as experiences in architecture, sculpture, ceramics, and industrial design to two-dimensional space arts such as painting and printmaking. The scope in time is equally encompassing. It allows for comparison of the magnificent 25,000-year-old animal paintings in the Caves of Altimira done to assure success to the hunter, with a serene fresco of classical gods in Pompeii or with the recent shattering commentary on war by Picasso in his "Guernica." Such a comparison shows how the culture, the tools and materials of the artist, and the artist's personal vision have produced in each a distinctive work of art. Research which capsules time and space challenges the mentally gifted.

The course, while allowing for great breadth and depth in content, provides for intensive individual research based upon reading, seeing, investigating ideas, and working with materials. Original statements by artists are consulted when possible.

The course is varied in content and in the type of laboratory experiences students undertake. Such experiences are experimental in nature and are intended to sensitize students to materials and tools and to line, form, color, texture, and their organization in space. These experiments are not product-oriented but rather enable the student, through firsthand involvement, to experience the creative process, to understand and become familiar with the tools and materials of the artist.

Secondary-school art courses of the past 25 years have been largely studio-type with emphasis on creating with materials. The art heritage, the clearest indicator of a culture and a most potent influence on the future of the culture, frequently has been by-passed or treated incidentally. Our purpose is to emphasize understandings and concepts rather than facts, to encourage personal reactions and statements through working with art materials and creative thinking and expression in an area all too often overlooked in academic education.

The subject matter of the visual arts is as old as civilization and as broad as the universe. Obviously, it would be frustrating to the student to attempt a survey of the 5000 years of world art from the early Egyptians to the present. This, therefore, is not a survey or history of art course. Yet, in our shrinking world we must seek a world view; we must invite comparisons and evaluations of the art of any time and culture. Through viewing, reading, discussing, experimenting with materials, and, when possible, firsthand contact with the art expression of many lands and many ages, the student arrives at sound concepts. These concepts concern the nature of art in its many manifestations; the role of the creative artist; and the influences which help to modify the art product, such as the nature of the culture, the materials and technology available to the artist, and the social and functional needs which are operative. Withal, the student sees art in its basic cultural role and as the organization of materials to satisfy an individual's social, physical, or psychological need.

It is both impossible and undesirable to write a "course of study" in art for the academically gifted students throughout the United States. Of necessity, art courses must vary greatly in their specifics from one school to another because of differences in the backgrounds of students, resources available, and the qualifications of teachers. The noncumulative nature of art means that in most of its areas the matter of sequence is best determined in and by particular situations. In fact, the effectiveness of a specific course lies largely in the success with which the art experiences challenge the students and meet their individual interests. While academically talented students are more homogeneous than an unselected group of secondary-school students, they vary greatly in attitude toward, ability in, and background of experience in the visual arts. Among individuals, too, as among classes from one school to another, there are great differences in opportunities to see fine original paintings and sculptures, well-designed buildings, and attractively planned communities.

Instead of a tightly structured course in either content or time schedule, the recommendations here presented are in the form of *guides to content and methods*. These discuss briefly the basic concepts which are to be stressed. In most instances, as well, a number of possible activities are suggested to illuminate these concepts. To these few, many more could be added; the actual activities in a class are limited only by the ingenuity of the teacher and the students, by the materials which can be secured, and by the facilities available. In any event, the great truths of art are so broad that they can be reached by many paths, and the wise teacher will devise the one or ones that are most useful in the particular situation in which he is teaching and to the students with whom he is dealing.

In addition, there are several appendices which include unit outlines developed for art courses for academically talented students, as well as an account of a related arts program.

GUIDES TO CONTENT AND METHODS OF THE COURSE

The guides to content and method which appear below are not presented in order of importance, although those which deal more directly with method have been placed at the end.

Creativity

Creativity is the basic experience in the visual arts. Giving visual form to an idea in materials is the common process of creation in the visual arts. Although there are great qualitative differences between the product of a young student and a great artist, the creative process is much the same for both—the organization and reorganization of ideas, the exercise of value judgments, the transformation of materials in keeping with one's ideas, the adjustment of one's goals as new relationships are discovered, the discipline of the materials as they are given form, the grueling effort that is often needed to achieve one's goals. A person may look at art, read about it, copy it, manipulate materials, learn processes, develop techniques, and still not grasp the essential and basic process of creation. Being creative is something which can be fostered and cultivated, but not forced; it must be experienced to be understood. It is the experiences which occur and the insight which is gained during the creative process that give one an understanding of art, that "unlock the gates of appreciation," that develop sensitivities which make possible a grasp of the work of others.

Creative involvement is possible in every aspect of art, whether one paints a picture, plans a home, or designs a desk. In any art product the ultimate value lies in the success with which the particular problems which it presents were creatively solved. The uniqueness of an object may reside in the basic idea, in the use of material, in innovation in form, or in a number of factors. But any product which is purely repetitive can have no merit other than in its function or craftsmanship.

There are obvioulsy many different levels of creativity. Picasso's revolutionary masterpiece, "Les Demoiselles d'Avignon," in which he began his first experiments in cubism, is not to be confused with a dress material pattern designed to be printed in 10 different colors to broaden its appeal. Yet even the latter is a creative product if it is a creative design. There is a difference, too, in the possibilities for creativity in various fields. Painting, being the most unencumbered by functional requirements of any of the art fields, has perhaps the greatest possibilities for creativeness and expressiveness. In the more functional areas such as industrial design, where specific requirements for use must be met, the freedom of the designer is more limited. Industrial design, as can be seen, is a field of great creative potential, but the impress of the designer cannot be as personal as in the more expressive fields.

In working with students in art, emphasis is always placed upon their creative approach. And the fact that this constant applies to whatever activity they are engaged in, in whatever area of art, is so basic and important that the reader will understand its being stated again.

Creative participation with art materials does not, of course, comprise the total of the experiences in any course. For some students, it may occupy only a small portion of their time, yet its basic importance and contribution must be kept always in mind.

For the academically talented student in particular, direct experience with art materials is not necessarily the best way to involve him when he first enters an art course. Indeed, many of these students may continue to shun active participation with art materials. Willingness of the student to accept his own expression may be impaired by his past lack of opportunity in the visual arts and by poorly developed or meager abilities. We may in many instances use approaches that relate more directly to students' developed capabilities, to conceptualization about art, to doing research on historic or contemporary developments in art, to investigating technical problems, and the like.

Activities such as these provide opportunities for highly meaningful and challenging involvement, and they should be pursued. Through such endeavors some students will be intrigued into more basic creative participation. Others we may never involve. As in any subject, there are levels of involvement in art and values to be attained from each. Good instruction moves each student to the highest level possible for him.

Broad Philosophic Problems

The content deals with the broad philosophic problems of art: the nature of a work of art, the role of the artist in society, and the role of art in the life of an individual.

The nature of a work of art. Basically, a work of art is a material or medium which has been given aesthetic order by the artist. As such, it has an independent entity. It is not nature or a facsimile of nature. Its formal organization—the arrangement of the plastic elements—is arrived at through the sensitivity and skill of the artist, and the aesthetic merit of the work is largely dependent on formal organization.

But a work of art is much more. It is a human statement made by an artist at a point and place in history. It reflects both his personal views and the culture of which he is a part. Whether the statement is an observation, a protest, or an affirmation, the human qualities which inhere in it suffuse the work and give it values in addition to the purely formal ones. Understanding and responding to the many aspects of a work of art—that is, seeing the world through the eyes of the artist—requires an open mind and perceptive vision.

The role of the artist in society. The artist both reflects and shapes the culture. He records truths not readily verbalized or easily perceived. The great artists of all times have discovered new aspects of the culture and have dared break with tradition. Such artists as Giotto, Michelangelo, da Vinci, El Greco, Rembrandt, Cézanne, and Van Gogh were artistic revolutionaries of their times. The artist is often misunderstood and rejected by his contemporaries. Later, when seen in perspective, the views which made him the object of ridicule or neglect in his lifetime become apparent, and he is then appreciated as the person of courage and vision that he was.

If the artist today is to function as both the reflector and creator of the culture, he must be a free person sensitively tuned to the wave lengths of a culture, free to discover new aspects of his time, and free to project his vision into time and space. The subversion of art to political or social ends in a culture leads only to the stultification of art and its loss as a factor in making the culture a vital one.

The role of art in the life of an individual. Art experiences develop in the individual an awareness of the existence of aesthetic qualities in his surroundings. His senses are quickened; he becomes sensitive to line, form, space, color, and texture and to their interrelationships. Sensitivity to aesthetic qualities also makes him dissatisfied with the ugly aspects and chaos of much of the environment. From dissatisfaction should come both a constructive organization of that part of the environment over which he has some control, such as his home and his selection of appliances, furnishings, clothes, cars, and a support of larger communal, regional, and national enterprises which involve art.

Art experiences which develop understandings of the artist's deliberate organization of form and color in space bring to the individual a new source of enjoyment —pleasure in the rich or subtle colors of paintings, in their exciting movement or quiet calm, in their smooth or textured surface, in their vigorous personal expression, or in their careful formal organization. All forms of art—architecture, industrial design, sculpture, illustration, typography and layout, pottery, china, textiles, all the man-designed products for living—take on new meaning as the individual becomes aware of good functional design and the honest, effective use of materials.

Art, too, is an important field of reference for the other areas in the humanities; languages, history, literature, and music operate within the same cultural bounds. Art enriches understanding in these other disciplines.

To the aesthetically perceptive individual, art is a means of communication, whether he be doer or receiver. Empathy with a great work of art is a re-creative experience, second only to the experience of creating it. A work of art speaks eloquently to those equipped to understand.

Philosophic problems are best dealt with in discussion, and a philosophic concept in art is valid only as it is based on works of art. Furthermore, a broad understanding of the concepts suggested above is arrived at only after extended periods of time and only as it is built up from many specific examples. This suggests that the philosophic bases of art be dealt with frequently throughout the course in class presentations, in general discussions, and in individual criticisms. The examples which serve as springboards for discussion are not only "accepted" works of art but also the products of the students as well.

A sound philosophy is not only slowly and perhaps painfully constructed, but it is tested as it is being built. And in building and testing the students will refer to writings by aestheticians and philosophers. They will see if generalizations valid in the fifteenth century still hold in the twentieth, if the work of such diverse artists as Botticelli, Rubens, Miro, and Mondrian have any factors in common, whether the function of the artist in society has remained constant or has changed. Academically talented students can handle problems of this sort and will be challenged by them.

Art in Contemporary Culture

The content begins with the art of today's world, a world of which the student has some awareness. The artist today is concerned with many of the same basic problems as the scientist. He is influenced by new space concepts, by the sense of the potency of the unseen or negative. And just as the scientist in smashing the invisible atom has created nuclear energy, so the painter creates forces and tensions on his canvas. The artist both influences and is influenced by the subjective thinking of the philosopher and psychologist.

Today many paintings and sculptures are nonobjective, that is, they were not conceived with recognizable subject matter. They may be highly abstracted or entirely nonobjective rather than possessing as subjects the easily recognizable figures and scenes of art works of earlier periods. In freeing himself from a narrow concept of subject matter, the artist has become more concerned with painting as painting with greater emphasis on the manipulation of media. And to free himself of the post-Renaissance tradition of oil on canvas, he is trying new materials and new combinations of materials such as enamel, aluminum, plaster, sand, paper, wood, etc., on surfaces not necessarily canvas. He is seeking truths, universal truths, and for him the universal truth resides in the particular. Because this is a time when our culture needs emphasis on the individual, the painter, more often than not, looks within himself for subject matter.

Always the artist has sought to fathom new truths. In the Renaissance it was a new understanding of man and the universe which led to the representation of three-dimensional space on a two-dimensional surface. Such artists as Uccello, Mantegna, da Vinci, and Michelangelo explored revolutionary new concepts in space. With the nineteenth century, artists were concerned with understanding air, light, and nature. The almost scientific experiments of Monet on the effects of changes in light on the form of such things as haystacks, bridges, and cathedrals demonstrate his lifelong quest to understand the natural environment. The contemporary artist lives with a new concept of space, outer space, which Van Gogh hints at in "Starry Night."

Today's youth must see today's artist in a contemporary setting, not as a holdover from the Renaissance. In today's world, art is not only reflecting the culture, but also is contributing effectively to all areas of life: to industry, the theater, television, journalism, advertising, city planning, and transportation, among others. Unfortunately, it is easier for the average twentieth-century man to accept and enjoy revolutionary ideas in contemporary functional design such as airplanes and automobiles than new forms in painting or sculpture.

One of the common characteristics of artistically naïve and insecure people is their rejection of the contemporary world in general and their immediate environment in particular as being aesthetically useless either in terms of merit as product or as providing bases for expression. Without hesitation students will draw pictures of Mexican peons, Swiss chalets, and tropical beaches which they know only vicariously, and yet they will reject as worthless the things they know well and perhaps have never really seen—television antennas, factories, tractors, or trees on the school lawn. One of the most important outcomes of art instruction at any level is the realization that the twentieth century has its own unique problems to solve and that these problems can be expressed in art just as well as those of any other period. And this outcome is best reached by involving students with today's world and making a study of the efforts of contemporary artists to bring aesthetic order into modern life.

Creating an Awareness

The content develops an awareness of the variety and extent of art in today's world—from purely expressive to extremely functional and from highly individual to broadly social. Painting and sculpture are but two manifestations of the creative artist. All products in which the creator was consciously concerned with the satisfying organization of form in space are in the art category: advertising and industrial design, architecture and city planning, textile and dress design, theater and television design, and the handcrafts (ceramics, jewelry, mosaics).

Some art is highly individual, the extension of the personality. Pollock or Rothko, Picasso or Rouault use idioms that are distinctly personal and deeply expressive.

Buildings, whether Gothic cathedrals or gas stations, city halls or factories, communicate at the social rather than at the individual level. By its form and materials, by its physical and spiritual reality, architecture communicates a way of life; it tells us of man's beliefs and the values he prizes. Marble, wood, stone, steel, aluminum alloys, and cement have, in turn, challenged the creative mind of man, the designer and builder.

A limitation in most art courses, at any level, is that they deal with only a part of the broad spectrum of art. Many concern themselves with only painting and drawing and ignore the more functional arts which often provide the contact of most people with the world of art. Or if painting is dealt with, some teachers impose their own biases on the class, emphasizing pictorial or abstract art depending upon their interest. The field of art is so broad that only a part of it can ever be grasped in detail. There is danger, too, in spreading interest so broadly that any part of it is grasped only superficially.

At the same time, however, the scope and extent of the field of art should be constantly demonstrated. In many instances this can be seen in students' interests. One may be constructing a mobile, another designing a sports car; one may be painting an abstraction, another making silver earrings. The teacher has the responsibility of showing the relationship between student interests and efforts to the entire field of art. The teacher also has the responsibility of seeing to it that classes are introduced to and become familiar with those important aspects of contemporary art that they have had no contact with.

Deepening Understanding

The content deepens understanding by considering the varied factors which are involved both in the creation and appreciation of a work of art.

All art products differ in expressiveness and intent. They vary from one field to another, from one artist to another, and among the products of a particular artist. A house built for the shelter and comfort of a family is different from a railroad station which is used briefly by many people. A toaster is never confused with a pencil sharpener. Michelangelo depicts the beauty and nobility of man on the ceiling of the Sistine Chapel; Picasso comments on the brutality of man in his "Guernica." The intent of an abstract or nonobjective painter is less readily discernible. The truths he is depicting may have social, psychological, or scientific overtones, or they may be completely subjective. The revolutionary forms he is using in his manipulation of pigment and other media proclaim the urgent human need for individuality in an age of threatening conformity. The content of the course should demonstrate the expressive element in all great art, whether it be in the dramatic simplicity of Brancusi's "Bird in Space," the mystical ecstacy of El Greco's "Crucifixion," the vibrant brushwork of Van Gogh's "Wheat Field," the soaring grandeur of Chartres Cathedral, or the rich surface of a Lurcat tapestry.

A remarkable difference of expressiveness and intent can be found among examples of student work in almost any class. This is especially apparent when students are engaged in different kinds of activities, but it is even more remarkably so when an entire class has been working on a common problem or exercise. The differences, whether they are in selection, emphasis, or technique, spring chiefly from differences in point of view or intent.

The study of writings by artists is illuminating here. While it is true that some statements by artists have no particular relevancy to their work, the utterances of many are highly eloquent of their aims and values. To reverse the procedure, to take several works of art and deduce from them the values which they present, is also stimulating.

All art is made from materials. These affect not only its usefulness for a particular purpose but also the form which the work of art finally takes. An artist selects his materials carefully in terms of what he wishes to do. At the same time he allows the materials to determine much of the character of the finished product by exploring and exploiting their unique qualities. The artists' purposeful choice of materials and the effect of this choice on the work is evident in a limpid, transparent water color by Marin and a turbulent oil painting by Van Gogh, an open metal sculpture by David Smith and a solid stone sculpture by Maillol or Zorach, a massive Egyptian pyramid which uses the compressive strength of stone and the delicacy of the George Washington Bridge which uses the great tensile strength of metal. The quality of the work of art depends not only on the sensitive vision of the artist but also on his ability to transform his vision through an art medium.

Here again, this important generalization is made concrete in classwork. Through working with a material such as clay a student learns what it will do and what it will not do. The development of the machine has removed most people from firsthand contact with materials, and the integrity and soundness of most products from craft cultures have too often been replaced with flagrant dishonesty and shoddiness. Direct contact with material, a study of its possibilities and limitations, is a sound means of making clear the role of material in the art product.

The twentieth century is a period when engineering has enabled us to take fuller advantage of old materials and when technology has given us many new ones. Suspension construction, stressed concrete, geodesic domes, a vast array of new plastics—all present fascinating areas for study and have given us new and exciting art forms.

All art involves organization. An artist organizes his materials to meet the need he is fulfilling and the idea he is expressing. The final product must have a unity in which all the parts take their places and contribute to the total effect. All objects are composed of plastic elements (line, form, space, color, and texture), and these are manipulated by the artist to get the sense of freedom or constriction, movement or stability, vitality or repose, sparkle or calm, centrality or all-overness that he wishes to convey.

The sense of unity in a work of art is the result of this organization of the plastic elements. The organization may be highly intellectual as in a Mondrian or a Cézanne; it may be emotional, held together by the dynamics of feeling, as in a Van Gogh or an El Greco. The organization may be more or less intuitive as in the case of primitive paintings or those of some of the contemporary "action painters" like Pollock or de Kooning.

In the art class, organization is usually dealt with in terms of design. The principles of design (balance, continuity, emphasis) are generalizations which locate constant factors in widely varying examples and provide not only bases for evaluations but also checks for creation. Design, too, offers a frequent opportunity for relating student effort to the world of art.

Sensitivity

The content develops a sensitivity to the arts of other cultures and periods as well as to the arts of our own time.

Contemporary cultures are making important contributions to the development of art. Scandinavian crafts are unrivaled in their imaginative and playful, yet reserved and elegant, design; in the superb use of materials; and in the high quality of craftsmanship. Artists in Japan are continuing the tradition of block printing; their prints make use of characteristic oriental forms and patterns, yet the products are distinctly contemporary. The American industrial designer is a new type of artist who designs for the machine. Through mass production, well-designed articles can be made available on a hitherto undreamed-of-scale.

Architects have in the last hundred years or so given us some new types of buildings. Steel has made possible the skyscraper, a form which dominates most large American cities. In such structures as the United Nations Secretariat and Lever House, a steel structure is encased with glass to give an effect of remarkable lightness and brilliance. A contrasting use of metal has made possible the great suspension bridges which span our rivers and bays. New potentialities of concrete have been exploited in the St. Louis air terminal and Yale University skating rink. Using the same structural principle as the eggshell, thin roofs soar over vast areas uncluttered by supports.

In painting, artists have been as inventive in creating new forms as the scientists have been in making discoveries of nature. They have developed new forms for a world of movement and a universe of space. They have reacted against the insensitivity of mechanization and the brutality of man.

In all art forms, work of significance is being done. As people alive in the twentieth century, we are most able, potentially, to enjoy the art of our times, and we should be alert to its contributions and values.

The rich inheritance of art treasures that exists throughout the world is an eloquent reminder of the greatness of which man is capable. It is a testament as well to the diversity of outlook and culture which has existed in man's history. No real understanding of past cultures or of the contemporary world which derives from these cultures is possible without a knowledge of the great architecture, sculpture, and painting of the past.

The Middle Ages come alive in the richly carved portals and glowing windows of Chartres and in the illuminated manuscripts such as the Chantilly Book of the Hours commissioned by the Duc de Berry.

Periclean Greece's grandeur lives on in the ruins of the Acropolis, ruins which state unequivocally that here lived a rational and highly developed people who achieved greatness.

Indian stupa carvings, statues of the Bodhisattvas, the paintings and carvings of the Ajanta caves, the dancing Sivas, and rockhewn temples reveal Buddhism as no treatise could.

To know Japan is to know intimately her wooden shrines and temples, her Buddhas, her sensitive woodblock prints which so influenced European artists of the last century, and the directness and beauty of the calligraphic brushwork of the painters of screen and scroll which are having an effect on such contemporary American painters as Kline, Tomlin, Pollock, and Tobey.

Regarding the Asian influence, Tobey wrote, ". . . if she (America) has constantly looked toward Europe, today she must assure her position, Janus-faced, toward Asia, for in not too long a time the waves of the Orient shall wash heavily upon her shores."[1] To bring an understanding of the here and now, the content of the course should explore the art of other times and places.

Judgments and Resulting Action

The content develops the ability to make discriminating judgments in all forms of art and a sense of responsibility for the improvement of the environment. There is constant opportunity for honest personal evaluation of the functional and aesthetic qualities of everything within the student's experience, from compacts to cars and from skis to skyscrapers. Painting and sculpture are just two areas in the student's life where discriminating judgments are required. But in these fields, too, exposure to art of many types is necessary: from the gentle pastel rhythm of Fra Angelico to the bold, raw statements of de Kooning; from the grotesque yet powerful statue of a primitive African funerary figure to the calm dignity of Queen Nefertiti or the "aesthetic astronomy" of Lippold's "The Sun."

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[1] Miller, Dorothy C., editor. *Fourteen Americans.* New York: Museum of Modern Art, 1946. 80 p.

Development of a sense of responsibility for improvement of the environment is possible only when the need is strongly felt. Students, through actual or vicarious experiences, should see well-planned communities, handsome functional architecture (both domestic and public), well-designed appliances and tools, and uncluttered transportation units. Having experienced these things, these potential leaders in American culture will realize the unplanned chaos of their own surroundings and sense the lack of opportunity in their communities to see original painting and sculpture. They then will want to work with others for the aesthetic improvement of the community and for the establishment of opportunities for all citizens to enjoy original works of art.

Interrelatedness of All the Arts

The content develops an awareness of the interrelatedness of all the arts. The different arts—music, dance, drama, literature, the visual arts—are extremely varied in their manifestations. They use different media: sound, words, movement, visual materials. Music is an art of time; the visual arts are arts of space; drama and the dance utilize both time and space. Dance and drama are, for performers in these fields, re-creative arts; they perform what others have composed. In the visual arts, most workers are original creators of such art products as paintings, sculpture, jewelry, ceramics, designs for buildings, textiles, and industrial products.

Yet, in spite of these great differences, there are factors in common among all the arts. Basically, they are all emotional in their appeal; they are expressive of human feelings and reactions; they are attempts to give organization and meaning to experience; they are statements of values.

Not only are there similarities in the bases of the arts but also in their form. Concepts of form—of beginning, middle, end; of climax and denouement; of theme and variation; of repetition, progression, transition; of harmony and unity among parts—are evident in all of them. Understandings and appreciations in one field of art can, therefore, be extended to others, and a remarkable breadth of view can be achieved.

There are relationships, also, in content and style. A particular mood can be expressed in various art forms. Ecstasy can be communicated in stone as well as in music; a painting and a poem can both move us by their expressions of grief. Furthermore, within every cultural period there are relationships among the various art expressions. Impressionistic music was written at the same time that impressionistic paintings were painted. There is baroque architecture as well as baroque music. Romanticism, as an idea, colored all the arts.

These are exciting relationships which challenge both sensitivity and intellect. Here is an area of special appeal to the academically talented. They can undertake special projects to investigate relations among various art periods and various art products.

In some situations, special classes can be set up involving two or more arts. Courses of this sort have been conducted successfully in a number of systems with rewarding results. For the students there is an almost infinite number of possibilities which present themselves and unlimited insight to be gained.

Techniques and Approaches

Various techniques and approaches are used to develop the potential interest of all students in some phase of the visual arts. Art, by its very nature, lends itself to a wide variety of teaching techniques and approaches. This diversity will be made use of with academically talented students to acquaint them with the breadth and richness of art and to extend as far as possible the opportunities for involving them. A good teacher will sense when a new approach should be introduced and when one should be extended. Flagging interest can be quickened with a change of pace. A well-timed and diverting trip can enable students to return to their work with a fresh objectivity and at the same time can provide them with ideas for new ventures.

Diversity of approaches and techniques is recommended to achieve richness and variety of response and understanding, not for the diversion or coddling of bored students. It is a means of broadening the range of challenge and achieving depth and intensity of effort and result.

Some of the various useful devices are:

- Building on individual interests and abilities
- Carrying on art activities involving the tools, materials, and working methods of the artist
- Challenging students to experiment with new ideas, techniques, and materials
- Arousing curiosity about art forms and materials
- Presenting new, even shocking, experiences with art forms
- Having continuous and varied contact with art through trips, exhibits, slide showings, and read-

ings which will extend and deepen their understanding.

Quality of Experience

The content provides for both breadth and depth of experience. There are exposures to many types of art, to the art of many ages and places. These experiences are not necessarily arranged chronologically or geographically; they are, perhaps, not studied as schools or movements. Yet the interrelation of the locale and mores of the culture, the materials available, and the unique genius of the particular artist as factors determining the art form will be explored. Contrasts and comparisons of art of different cultures are examined. There is emphasis on the art of the present as it relates to our contemporary culture.

Class experiences are of both a group and an individual nature. Field trips, showing of visual materials, and discussions are common group experiences in which both broad and specific concepts of art are considered.

Individual experiences involve many activities on the part of the student of art. He explores media. He experiments with color, form, line, and texture to discover their expressive powers. He does intensive research on a particular aspect of art, an art concept, or some design or architectural development. The presentation of his findings in an art form (annotated bulletin display, illustrated talk, photographs, exhibit of materials collected, monograph for library use) is another part of the individual experience. And, finally, the student produces a work of art: a painting, a piece of sculpture, a print, a mobile, a mosaic, a stained glass design, or another individually expressive art form. It is important that the end product not be overemphasized. The student, whose presentation of research may take the form of an exhibit or illustrated talk, should know that these, too, can be creative and aesthetic experiences.

ADVANCED COURSES FOR STUDENTS TALENTED IN ART

Academically gifted students with special ability in art should have opportunity for further work in art. They need to extend their contacts to areas of art new to them; they need the chance to pursue interests in the fields already known to them more intensively; they need to undertake work of an increasingly individualized nature. It is especially important that artistically gifted students at the secondary level have opportunities to develop their abilities, for there is evidence that lasting ability as a performer in the visual arts makes its appearance during adolescence. Education would fail in its social objectives if these students were denied opportunity for development.

Students, who in the basic course discover a particular interest in painting, are given time to explore media and develop needed techniques. They are encouraged to discover personal means of communication through the organization of the plastic elements to give form to their ideas.

Students who become especially interested in the three-dimensional arts may explore clay, wood, stone, plastics, and metals. They design in clay, plaster, wood, stone, and composition blocks. They build mobiles and other constructions in many materials.

Students whose interest is in design may choose endeavors of significance to them: the design of a textile, program cover, compact, toaster, or hi-fi set. They may work intensively in designing and making a costume, a poster for school or club use, the settings for the school play; in planning the interior of a club room; or in designing or rearranging their own rooms.

It is not practicable or desirable in the academic school to have separate courses in all these areas. However, diversity of activity within and among classes is a characteristic of many outstanding art programs. The students grow not only through involvement in their undertakings under the guidance of the teacher, but also through seeing and working alongside students pursuing other enterprises.

If the common denominators of all the arts (organization and honest use of materials in giving form to a valid idea, satisfaction of recognized need or purpose, and personal integrity) are kept uppermost in the class thinking, academically gifted students will be able to progress rapidly in the art areas of their choice. The high-school art teacher who is well trained is competent to offer advice and guidance in many areas, though his professional training will be stronger in some than in others.

It is strongly recommended that advanced art courses for the gifted *not* involve imitations of the style or subject matter of artists who may be studied. Being influenced by an artist one admires is as desirable as it is unavoidable, but this need not lead to servile copying. Study of the work of important artists is, of course, a major means of helping students move to higher levels of achievement, and learning from these works should be a means of helping students to the production of better visual statements of their own ideas. It should not mean the total acceptance of the views of the artist being studied, for this denies the individual nature of artistic expression. The advanced art for this group should be, in the main, laboratory experiences in *depth,* the areas of experience being largely of the students' choice. It would be enriched and deepened by art field trips, by extensive reading, by contacts with artists, by visiting exhibits, and by the use of a wealth of visual materials. Recognition of the broad cultural bases of art and its role in everyday life through the making of sound aesthetic choices should be both maintained and strengthened.

CHAPTER IV

Resources for the Visual Arts

The visual arts require visual materials for effective instruction. Such materials are needed, not only to stimulate the student and to show the relation between his work and similar products outside the classroom, but also to extend the scope and intensify the depth of his contacts, his knowledge, and his appreciation. This is not to say that it is only through visual means that art instruction proceeds. It is simply an acknowledgment of the nature of the field.

As in any other area, firsthand experiences are apt to be the most compelling in art. Classes, therefore, should make extensive use of actual *things:* original paintings, industrial products, buildings, furniture, parks, communities, etc. In many instances small paintings, prints, and small objects are regular classroom materials or can be brought in by the teacher and pupils. In many instances, as well, students will go outside the school to museums, monuments, to other points of interest, and to nature. Some cities or urban areas, of course, have more resources than others for the students in art.

Of necessity, many of these extensions of experience are vicarious, through pictures of various sorts (black-and-white and colored stills, color transparencies, illustrations in books) and through filmstrips, motion pictures, and television. Increasingly, we are becoming aware of the effectiveness of visual materials in the presentation of images and symbols and, consequently, the number and variety of these which are available are increasing rapidly.

Firsthand experiences are, of course, most readily had with the near-at-hand. The resourceful teacher studies the community for possible field trips to places which offer experiences in the visual arts: well-designed homes and public buildings; displays of good furniture and machine-made products in shops and stores; the studios of potters, painters, sculptors, and designers; exhibitions of painting, sculpture, weaving, crafts, precision-built tools, household goods, advertising art, or fine prints. If the school is in a rural area far removed from any art center, much of this experience will, of necessity, be vicarious. The experience will come through watching television, slides, and movies and through seeing color reproductions and museum replicas.

Art instruction also sensitizes students to the beauty in nature: to forms and form relationships, to colors, textures, intensities, and contrasts. It is from these forces and rhythms of nature that we derive our basic sense of organization in all of art. The student becomes visually alive to the world of nature as well as to what man has found; he becomes aware of the organic beauty and magnificence of a tree root, a fungus, a weathered wall; he may, in short, look and admire, photograph or sketch so that he may truly *see*.

A sensitive vision enables the student to respond to the form, space, and color in roof-top antennas, chimney pots, woodlots and grasses; to the pattern of contour plowing and tracks in the snow; to the structure of a bird's wing or the varied symmetry of a leaf's veining; to the beauty of form in smooth pebbles or in barns and bridges. Some of these resources are more readily accessible in rural than in urban areas. But the important thing is that it is the development of awareness and sensitivity which is the objective, and this must start with materials at hand.

Many museums have traveling art caravans which bring original works of art to schools. State universities and other institutions of higher learning often have visual libraries which may be tapped. Industrial plants, service clubs, scholastic organizations, women's clubs, or labor organizations frequently will sponsor bus tours to the nearest university or city gallery.

During recent years there has been a great increase in publications, both periodicals and books, which are made up wholly or in large part of visual materials, most often reproductions of photographs. These provide a wealth of visual materials on an almost endless array of topics. Several current popular magazines frequently include reproductions of historic and recent works of art. A number of excellent periodicals exist which are devoted to the visual arts and contain superb materials, both historic and contemporary. Special mention should be made of the large number of remarkable books on many phases of art which are now available. They are often of compelling beauty and on both intellectual and visual bases can hardly fail to excite perceptive and intelligent students. Illustrated publications put out by institutions such as the Museum of Modern Art and the Metropolitan Museum in New York and the National Gallery in Washington, besides providing visual and textual material on historic and contemporary art and artists, serve also as valuable springboards to discussion. Increasingly, too, color transparencies of works of art and of nature are available. While prepared usually for group instruction, they can be highly useful for individual study and instruction.

Film, the great new art form introduced by the twentieth century, is, of course, useful in practically all areas of education. In art, as with other kinds of photography, it can bring to a class art forms from every part of the world. In addition, however, the film itself is a work of art, so that not only are particular films useful for their content, but all films are of interest because of their organization. Many films, also, involve the use of arts other than visual ones, for example, music and drama.

Almost every community has able practicing artists. Visits to their studios to see works in progress and to talk to them about their ideas and methods of working constitute another rich resource. Able practicing artists or artist-teachers who, because of their interest frequently give their time for such services, can often be brought to the school to demonstrate in various media. It is up to the school to initiate such programs and to reserve the right to select the participants.

Such artist demonstrations may be effective and reach a larger audience if arranged as television programs. Schools need to work with educational television stations in planning enrichment of the school art program through carefully coordinated programs. As a medium for art education, television has its chief value in broadening one's contacts and awarenesses and in developing one's appreciation. Programs of this type, rather than the how-to-do-it brand, need to be developed.

Whether the community is rural or urban, its resources should be explored, not only for the enrichment they have to offer, but also because, through awareness of community resources or lack of them, the academically gifted student, destined to be the cultural leader of the future, senses his own responsibility for his cultural environment.

CHAPTER V

Administrative Responsibilities

In programs for academically talented students in art such as are proposed here, success is dependent upon active and forward-looking leadership on the part of school administrators. Other determinants for success include factors such as willingness of the community to accept and promote the program, attitudes of parents, cultural climate of the community, interest of the student body, availability of resources, quality of staff, nature of facilities, and extent of financial support. It is the responsibility of administrators to gauge the extent to which these factors are present and to take needed steps to create and maintain an educational environment in which the student, teacher, counselor, parent, and community work effectively together. The administrator cannot be expected to provide the leadership in the program in any narrow, technical sense. He can, however, be expected to realize the basic importance and nature of the program and to be of great assistance in making practicable its particular requirements.

THE GUIDANCE PROGRAM

Counseling services are at the core of the processes involved in identifying both academically talented students and those with special art abilities and in planning and guiding their educational programs. In small schools, the counselor may be the principal or a teacher selected to perform counseling functions. In larger schools, specially trained counselors are generally available. For the identification of academically talented students, as currently defined, there are many valid and reliable measures which provide objective results. It is with considerable assurance, therefore, that this group of students can be singled out for special consideration. The same situation does not exist for identifying those students who are talented in art.

Problem of Identifying Talent

Identification of academically talented students who, in addition, possess special talent in art is difficult due to the nature of art. Art, by its nature, is highly subjective, and art expressions are individualized. As has been pointed out, the noncumulative nature of art means that there is no body of content which can be tested which bears any close relationship to either ability or accomplishment. Largely for these reasons, neither art nor art abilities lend themselves to standardized or objective measurement. In fact, it is probably more accurate to say that objectivity of measurement is impossible in a field in which the criteria of excellence are subjective. This means that the identification and counseling of the artistically gifted must be based largely on subjective evaluation and on close association with the individual student and his creative work.

There are, however, a number of general criteria which can serve as guides for locating artistically gifted students. These include: a history of deep and continuing interest in art, the production of work marked both by originality and quality, and an acceptance of innovation and experimentation as valid approaches to art and of variation as inevitable in the product.

Even such general criteria as these must be applied with knowledge of the background of a particular student. If his background is very limited both in and out of school, he may be performing at a level far below his potential.

Well-documented cumulative records should be available to counselors and should include data supplied by parents and teachers on such matters as special art interests, history of performance, participation in out-of-school art groups and classes, and special contributions to school activities.

The art teacher should be actively engaged in the counseling process. Student performance beginning in the elementary grades and continuing in secondary school will supply some of the soundest bases for counseling. Information on such performance will not be available from tests but must come from carefully kept records and from the teachers of the students. As part of an over-all program of identification of the talented, teachers of all grades might be asked to identify those students who show special aptitude in one or several areas. These students then can be studied, encouraged, and helped. The important role of teachers in the career plans of students talented in art was shown by Woods, who found that students in college or college-level institutions pursuing studies leading to an art career received most of their encouragement from their teachers in elementary and secondary grades.[1] Close articulation between elementary and secondary grades or at the juncture between junior and senior high school obviously is important. At all levels, careful observation and analysis by teachers and personal contacts with the student will provide important material on which sound counseling can be based.

Persons outside the field of art who are involved in counseling artistically talented students should be thoroughly familiar with the art program and with talented students. Special orientation to the art program of those persons performing counseling functions is often essential. They should visit the art rooms frequently, observe the work being done, attend class criticisms, and talk occasionally with individual students. This should give them insight into the program, into the nature of art and of student growth in art, and into the dynamics of individual students. Knowledge of an art program obtained only through seeing finished art work of students will not provide necessary insight into the methods and goals of the program needed for effective counseling.

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[1] Woods, Walter A. *Visual Form-Space Manipulation and Its Relation to Art Participation.* Doctor's thesis. New York: Teachers College, Columbia University, 1952.

Staffing the Program

There recently has been a great deal of discussion on new approaches to the staffing of schools involving the introduction of more diversified teaching techniques and on the use of personnel with more specialized, and more limited, responsibilities. Breaking up the usual broad responsibilities of a teacher among a number of individuals such as professional teacher specialists or "master teachers," assistant teachers, aides, community consultants, and staff specialists is one of the proposals most frequently made.[2]

It is both reasonable and desirable that, in an age of specialization, education should develop some specialized techniques of its own and thus reap some of the advantages of specialization. Any thoughtful educator realizes that only a beginning has been made in taking full advantage of the revolution in mass communications. The fact that a speaker on radio and television can now communicate directly with people ranging in numbers from several hundred to tens of millions opens up fantastic possibilities. But it also makes apparent many dangers and limitations. In particular, special consideration must be directed to which aspects of education are amenable to large-scale instruction and which are not. In general, it appears that teaching by television is best suited to the presentation of materials of an inspirational nature that can open up new possibilities in a field through the use of teachers who are dedicated, compelling, and scholarly and through the use of resources not available in the usual school. Television also lends itself to the presentation of facts and concepts in the cumulative fields of learning. Television instruction is not suited to highly subjective areas such as art. In highly subjective areas the success in instruction depends greatly on such factors as building upon the individualized ideas of each student, on the fragile process of building security of the idea in each student and supplying particular encouragement and assistance when needed, and on the wide variation in product which should result from good instruction in a creative area. We should expect many innovations in instructional procedures during the next few years, and the result should be improved education for all students. Vigilance is continually necessary to see that basic values in particular subjects are not rejected in enthusiasm over new educational techniques.

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[2] **Trump, J. Lloyd.** ***Images of the Future.*** **Washington, D.C.: National Association of Secondary-School Principals, a department of the National Education Association, 1959. 46 p.**

Meeting the Needs of the Academically Talented

High-quality instruction for academically talented students demands highly competent teachers. The capabilities of these teachers must be well used through such factors as class assignments best suited to their capabilities, availability of resources, and assistance which will enable them to make best use of their particular abilities.

The teacher of art for academically gifted students is a gifted person himself. He must be gifted, in order to meet the challenge of working with gifted young people. He has a broad range of interests which will enable him to associate himself with the varied interests which these students will bring to the art class. We cannot expect a superman, but the amount of understanding and knowledge which this teacher has in such areas as the sciences, mathematics, history, electronics, and the humanities enables him better to engage the students in art productions related to their particular interests.

So far as the field of art is concerned, the teacher is a skilled performer in one or more media. He may be a good painter, a potter, or an industrial designer. His intensity of involvement with one or several areas not only gives him important insight into the field of art, but it also establishes him as a person of competence to the academically talented students who, by and large, put a high premium upon performance. For the teacher, this competence provides him a measure of assurance in dealing with these students.

The teacher is able to verbalize and communicate effectively. This is important inasmuch as he is dealing with students whose verbal facility is high. He will, of course, make it clear that all aspects of art cannot be reduced to verbal concepts. Nevertheless, ability to discourse on art concepts, art procedures, and art products is essential in establishing contact with these selected students.

The teacher is enthusiastic about his subject. This is a matter of great importance in the arts, for instruction is, to a considerable degree, a matter of contagion involving the emotions as well as the intellect.

The teacher is broadminded and understanding about all phases of art. He has, of course, his own likes and dislikes and may well communicate these to his students. However, holding a strong point of view does not preclude understanding and working with the points of view of others. It is a poor art teacher, indeed, who rules out all approaches to expression but his own or who limits students to a narrow field of endeavor. He knows that there are many valid approaches to any area of art; that each one, such as painting, sculpture, industrial design, interior planning, or achitecture, has its own problems, values, and contributions; and that, within each, wide variation of solution is not only inevitable but desirable.

Receptivity to new approaches is a characteristic of the teacher. He realizes that the students, in drawing upon their own varied experiences, will come up with ideas and procedures which are new to him and which have both educational and aesthetic validity. These he must accept, work with, and improve. He will be sympathetic to the varying abilities of these students and able to indicate needed experiences in order to promote their growth in skills and understanding.

The instructor must be able to identify himself with the students in his classes through their work. This is particularly important in creative work in art where it is essential that students draw upon their own experiences in establishing their expressive goals. Only when the teacher is sympathetic toward and understanding of the goals of the students, both in clarifying and extending these goals and in providing instruction in techniques and skills needed to reach them, can he be helpful.

Understanding students' goals does not mean, of course, that they must be accepted. Indeed, the reverse is often the case. But in the highly subjective process of creation in art, if a teacher does not know what a student is trying to do, he is clearly not in a position to be helpful. When dealing with any work in the arts where a product should be so clearly a statement of self, the teacher needs a sympathetic understanding of the goals of each student from the outset.

For the academically talented student working in art, a special (and difficult) blend of warm encouragement of beginning efforts and objective application of high-level standards is necessary. Most academically talented students at the outset of an art course will have standards in art that outrun their capabilities. They will be both timid regarding the worth of their ideas and their skills in giving them acceptable form, and sensitive toward criticism. These concerns are not limited to any one age or intellectual level, but for the academically talented student with his usual record of high achievement and his intense concern with performance, these special instructional requirements take on a particular relevance.

Administrative Responsibility

The art teacher of the academically talented should be assisted by the administration in order to function at maximum efficiency. Such assistance might include scheduling classes of an appropriate size for effective teaching, encouraging professional contacts, and providing consultative help.

The number of students with which a teacher works is reasonable and conducive to individualized instruction. Although large group instruction may be applicable to nonstudio types of activities, 25 students should be a maximum number in studio classes. Smaller groups should be arranged whenever the use of tools, power equipment, and studio facilities dictates adjustments. The ratio of pupils to teachers should be determined by the nature of the students and the kinds of activities they are undertaking.

Staff capabilities are continually strengthened through professional contacts. The administrator will maintain professional and community interests of teachers, encourage membership and active participation in professional organizations, provide for attendance at professional meetings, and encourage advanced study and travel.

Special assistance is provided to strengthen the program. This may be in the nature of consultative help involving the services of such persons as museum personnel, supervisors or coordinators, and county or state art education personnel. Assistants to the teacher are desirable in order to make fully available his abilities in actual teaching. Help may be provided in preparing materials, in setting up displays, in assisting individual students in studio work, and in ordering and maintaining supplies.

Community resources and artists are utilized to augment the school staff whenever these resources are of good quality. Persons of professional caliber prove valuable assets for programs for the academically talented student. Careful selectivity should be employed in soliciting persons for the instructional program to avoid involvement of mediocre talents or shoddy craftsmen in a program of excellence.

Scheduling the Program

As secondary-school programs undergo examination and as new offerings for the academically talented student are introduced, variations in scheduling practices must be anticipated. Current proposals suggest substantial revisions from some of the traditional methods. More flexible approaches to scheduling are being tried, thereby freeing the school day from the tyranny of rigid, uniform class periods. Such practices are especially suited to the visual arts because creative endeavor does not lend itself well to inflexible time schedules. Large group instruction, small group work, and individualized study or studio work all have their places in effective teaching in the visual arts.

Separate sections. Separate sections of the basic course may be set up for students talented in art. Inasmuch as the academically talented group includes a substantial proportion of students who are gifted and/or interested in art, a special section or sections may be set up for them. Classes such as these could carry on activities of both a more extensive and intensive nature. This arrangement is most suited to large high schools. In most schools, the basic course or the various sections of it will include students of a wide range of interests and abilities in art. It will be through individualized teaching that the varying needs and abilities of these students will be dealt with.

Flexible time schedule. Differing lengths of time may be scheduled, based on students' ability and interest in art. A time schedule, varied for different groups, could be utilized. Thus the art course could be scheduled three days a week for the academically talented students and two additional days for those of them who are gifted in art. This would enable the latter group to have time to pursue their interests and develop their abilities more intensively.

Double periods or long time blocks may be economical planning. They provide more adequate time for activities requiring more than the typical 45-55 minute period and make possible savings on preparation and "clean-up" time. Longer time blocks also prove more desirable for gifted students whose attention span exceeds the average. Block planning usually involves several subjects, each of which is set up on a several-meetings-per-week basis instead of the usual daily sessions.

Short trips to points of interest near the school can often be managed within a regular class period. Longer and more intensive trips require more time. For classes meeting at the end of the day, such trips are merely an extension of the school day and can often be arranged with little difficulty. But a field trip, if important, should be available to all students who would profit from it, regardless of when they meet for their art class. It is important to academically talented students to set up trips for them to see, firsthand, significant monuments, important museums, and special exhibitions. For students in a small community, trips to a metropolis could include not only visits to points of interest in art, but also attendance at a dramatic performance or concert or a visit to a laboratory or factory as well. The important thing is that the students who have the capacity to comprehend greatness should have the opportunity to experience it firsthand.

Enrichment program. After-school, evening, and Saturday groups may be organized. These are invaluable supplements to the regular school program. There is usually a natural selective process that operates both for students and teachers, and these and other factors make such extraclass activities endeavors of great vitality. Such classes are in fairly common use, often in cooperation with a local museum or art group. Special groups with specially selected instructors might well be set up for academically talented students.

Academically talented students may be scheduled for a heavier school load than is usually required. A common criticism of American education is that we do not sufficiently challenge our secondary students, especially the brighter ones. With their intelligence, academically talented students go more deeply into the subjects they study and are able to extend their interests to other areas as well. In addition, for most talented young people, the opportunity to do more than is required is eagerly accepted, for they realize that increased knowledge and competence are exciting in themselves and, basically, are their own rewards. These students, therefore, might reasonably be given heavier class schedules than students of lower academic ability.

CONCLUSION

The challenges which face American education today are tremendous. Pressures, suggestions, and proposals come from many sources and from all sides. If the schools are to meet the needs of the future, modifications of existing programs are inevitable, for education in a changing world must change.

But education must take the long view. Its concerns are both general and specific: concern for the entire culture and for each young person in it; concern for the general education of each student and for his professional training. Addressing itself as it does to the intelligent use of our richest resource, the growing interest in education of academically talented students is one of the healthiest of recent developments in a general educational re-evaluation.

Education of excellence is essential for persons of excellence. These future leaders of our society must be persons of competence and sensitivity. Not merely must they be trained, they must be educated, and broadly so, for an age of science demands great emphasis on humanistic values. The colossal world problems which require equally colossal decisions can have satisfactory solutions only if dealt with in human terms.

As a humanistic subject, the visual arts have unique and essential contributions to make to education. Their locus is in the realm of values and feelings; they extend, deepen, and mature the emotions. They introduce students to new means of communication; they complement the highly intellectual approach to learning which characterizes most of their schooling; they intensify visual and sensory experiences, encourage inventiveness and a creative approach to problems. They aid in evolving criteria for judging the many forms of art products from which all must make choices, and bring to all an increased awareness and a realization of the obligation to improve the environment. By making one visually aware, they give color to the most common of everyday experiences and make possible the enjoyment of some of the greatest of human expressions.

The aspects of our lives which are affected by the visual arts are many; their potentialities, great. Education must accept the responsibility for the development of creators in the arts who are essential in molding a desirable culture of the future. Education must also accept the responsibility for an artistically literate populace who understand art as a force in their lives and who support it.

Somehow, in every artist was born the necessity to create works of art, to make his statement to the world with the intention of bettering it. Somewhere in every purchaser of a work of art, no matter how modest, in every appreciator, in every founder of a museum, in every supporter of an art cause, was born a love of art and a desire to share it.

PART II · CHAPTER VI

Art in the Houston Public Schools

The public schools of Houston, Texas, are undertaking various programs at both the elementary and secondary levels to provide art experiences for academically talented students. These provide additional art experiences for the academically talented as well as additional art experiences for students gifted in art who also are performing well in all their other school subjects. The programs as described below supplement the regular course offerings in art in the Houston schools.

FINE ARTS SEMINAR IN SENIOR HIGH SCHOOL

The fine arts seminar now being conducted in senior high schools in Houston grew out of a number of exploratory sessions of the Arts Council of Harris County whose member organizations include most of the significant cultural institutions in the community. Later, at a meeting of three officers of the Arts Council with the superintendent of schools, concern was expressed over the nationwide emphasis being given to increasing science and mathematics programs in secondary schools and the meager attention being paid to education in the humanities. The resources of the Arts Council were offered to investigate ways of making courses in the arts as strong and meaningful to young people whose talents lay in those areas as is being done for science and mathematics. The superintendent and his staff members accepted the offer of support, and a Fine Arts Study Committee was instituted. It was made up of directors and supervisors from the departments of music, art, literature, drama, and dance. Later, the directors of guidance and library services were added.

Meetings were held with teachers in the various areas of the humanities, and many plans were suggested, discussed, and rejected. The Arts Council also met with its groups, and each defined the types of services it could give the schools. It was an impressive list: demonstrations; lectures; finished productions in music, drama, dance; panel discussions; illustrated talks; field trips to see rehearsals, exhibits, or to meet celebrities.

A highly productive meeting was held with 25 students from various high schools, all of whom were enrolled in one or more of the arts and literature courses. It was at this session that a definite plan began to crystallize. Until then, the expectation had been to offer an elective course in arts appreciation aimed at students who had never taken any courses in the fine arts field. Even as this was being discussed, its drawbacks were obvious; particularly apparent was the lack of skilled teachers for such a course. The students put up a strong plea for the opportunity to take courses in arts other than the ones in which they were presently enrolled. A crowded curriculum, limited electives, and the pressure of meeting college entrance requirements made it impossible for practically all of them to have experience in more than one of the fine arts. The students suggested that a course be developed for those who were already performing at a high level in the fine arts and literature classes which would give them insight into and information about all of the arts. This seemed an exciting and workable offering, and planning for it was undertaken at once. To begin the program, three high schools were invited to participate.

As developed, the seminar is open to juniors and seniors and runs for a period of 18 weeks. To qualify for admission, students must have a generally high academic grade average and be recommended by faculty members. The seminar involves art, music, drama, dance, and literature, and teachers from all these areas took part in the planning. Students enrolling for the seminar sign up for a course in their field of particular interest. Classes in all five areas, however, are scheduled at the same period of the day. For four days a week, each student meets with his regular teacher in the subject in which he is enrolled. On the fifth day, all come together for the art seminar.

The conduct of the general session varies. Frequently, it is given over to a guest artist from one of the areas who may perform before the students or discuss the problems of his field with them. At other times, it involves team teaching by faculty members from two or more art areas, or the sessions may be planned by the students in one or more of the classes.

Presently, between 200 and 300 students are enrolled in the art seminar in each of the eight participating high schools. Students receive one-half unit of credit in the class in which they enroll. A notation is attached to the high-school record indicating the special work accomplished in the art seminar.

The values of the seminar have clearly established themselves. Students are provided opportunity to pursue their fields of particular interest. At the same time they get a much broader look at all the arts in our culture and acquire an understanding of the particular contributions of each and of the relationships which exist among them.

PUBLIC SCHOOL ART SCHOLARSHIP CLASSES

These classes are open to students from the fourth grade to senior high school. Selection is made on the basis of the quality of their art work and on teacher recommendation. Although great emphasis is given to selecting pupils who are talented in art, other factors such as their personality and general academic competence are considered.

Art Scholarship students receive class instruction after school one day per week for an hour and one-half. Continuation in these classes from year to year is contingent upon attendance, continued interest and development in art, and maintenance of high scholastic record.

The classes are conducted in cooperation with the Houston Museum of Fine Arts and are held in the Museum studios. Approximately 400 students per year enroll in these classes. This program, which is now in its twenty-fifth year, has the distinction of being the first in Houston to provide for gifted students in any subject field.

Over the years, the Art Scholarship classes have been a source of encouragement and stimulation to thousands of students. Many of the community art leaders, teachers, artists, and architects were scholarship students during their school days.

PROGRAMS FOR ACADEMICALLY TALENTED IN THE ELEMENTARY SCHOOLS

Two programs are being carried on in the elementary schools for students who are academically talented. The first program is a six-week session of summer work for students with high academic potential. Pupils are recommended by principals and teachers of the elementary schools. They must have an IQ of 130 or above and must have achieved well in all of their school subjects.

This program is carried on in self-contained classroom situations. Emphasis is largely on arithmetic, language arts, science, and geography. Art experiences, however, are an important part of the classwork; drawing, illustration, puppet making, and general construction are frequent activities. About 400 students have taken part in this program each summer.

The second program is a system-wide venture, carried on in all 145 elementary schools, which attempts to identify able pupils and to nurture their special talents. These students who are identified as talented in one or several subjects are not placed in separate classes. In some fields, such as foreign languages and instrumental music, special instruction is offered before and after school. In other areas, such as art and science, work is conducted under the teacher's guidance during the regular school session.

No specific program is established for suggesting or prescribing how much or what kinds of work, beyond the regular curriculum, is pursued by the children who have special talents. The fact that the teacher knows who these students are and helps in locating them means that special attention can be given to them.

Tests are administered in such areas as reading, arithmetic, and spelling, and records are kept. Talent in art is identified by such factors as quality of work and persistence of interest and effort.

It has been found that classroom teachers need considerable help in identifying exceptionally able students. They also need help in developing skills and knowledge to enable them to work more creatively with the talented students.

An intensive program of inservice education for elementary teachers is operating concurrently and with excellent results. More than 2000 teachers attended a series of 15 recent workshops devoted to child growth in art. Several hundred more attended art workshops in crafts and special media.

CHAPTER VII

Special Art Program in Pittsburgh

For many years the art teachers of the Pittsburgh Public Schools have felt the need for a course in art planned especially for academically talented students. In most instances these students were either being denied the opportunity to enroll in art courses or found that the ones available to them were not suited to their interests because of the heavy emphasis on studio activities.

A COURSE FOR ACADEMICALLY TALENTED STUDENTS

In 1960, the board of education allocated funds for a course in the visual arts for academically talented students. The course, introduced in four high schools in the fall semester of 1960, meets the academic curriculum requirement of one year of fine or industrial arts. It is planned to challenge academically talented students who are interested in knowing more about the visual arts but who feel that they have no special creative ability in art. Although the course is intended chiefly for students in the eleventh and twelfth grades, some mature tenth-grade students who are interested and who qualify are admitted. The original enrollment of 15 to 25 students in each class has risen to somewhere between 28 and 36 in each class, and student interest is high. Parent reaction, too, has been enthusiastic.

Basic Concept of the Course

The concept of the course was developed from the following basic ideas:

- Art satisfies basic human needs.
- Art communicates feelings and ideas.
- Art involves spatial organization arrived at both consciously and intuitively.
- Art requires honest use of materials.
- Art is the sincere, unique expression of an individual or group.
- Art depends, for its ultimate value, upon the aesthetic order which is given to the ideas and feelings being expressed.

General Objectives for the Course

- To stimulate greater awareness of space, color, form, and texture everywhere and greater sensitivity to them
- To promote greater understanding of the importance of the arts in life
- To foster greater understanding of creativity through a personal experience in at least one art medium
- To develop ability to form independent aesthetic judgments
- To encourage the development of an open-minded curiosity about new or different art forms and expressions
- To discover art as a continuing source of enjoyment either as appreciator or producer or as both
- To develop a realization that there are basic aesthetic values exclusive of social, economic, and political values
- To produce visually literate citizens.

Planning the Course

Prior to the introduction of the course, a committee of four teachers and the art director met for one month during the summer to plan the course. Each of the teachers planned one of the major units. Periodically, they read one another's plans and made constructive suggestions. An important part of the planning was the selection and purchase of a wide variety of visual materials, such as slides, reproductions, films, and textiles, and the assembling of exhibit materials that would illuminate and enrich the course in terms of the basic concept. One afternoon a week the committee previewed films and slides for use in the course. An aide was engaged to mount and letter the exhibits. All the planning activities were coordinated by the director of art.

Nature of the Course

By means of excellent visual materials, field trips in the community (including visits to galleries, museums, and the studios of artists), demonstrations by artists, talks by museum and college art specialists, readings and discussions, and some studio work, the course attempts to make students aware of their environment and sensitive to aesthetic values. It helps them through these varied experiences to formulate criteria for making aesthetic judgments; it enriches their background for understanding and enjoying the artistic expressions of all times and cultures.

With the realization that art is everywhere, not just in galleries and museums, four units were planned to cover those fields of art that have been significant in man's social and cultural development and that are a part of each individual's life today.

Unit I, on painting and the graphic arts, involves the study of easel and mural painting and drawing, including religious painting, social satire, cartoons, and book illustrations; the arts in advertising; and printmaking of many types, such as etching, wood block, lithograph, and serigraph.

Unit II, on sculpture and ceramics, includes both the study of sculpture in metal, stone, wood, and plastic—from small sculptured artifacts to massive architectural sculpture, from primitive gods to contemporary mobiles—and the study of ceramics—from the primitive vessels of prehistoric societies to sophisticated products of modern Scandinavia.

Unit III, on the building arts, deals with domestic and religious architecture, public buildings, buildings for commerce and industry, and community planning.

Unit IV, on industrial design and crafts, is concerned with the development of such articles of daily use as a chair, a tool, a vacuum cleaner, a toaster, an iron, or an automobile; a survey of some of the folk crafts of nonmechanized cultures; and the study of fine contemporary handicrafts.

The four units of the course inevitably overlap, for what is valid in one field of art expression is valid in all. A particular class section may begin first with the unit on painting and the graphic arts, while another may begin with the unit on the building arts. The order is not important, for, regardless of sequence, the basic ideas of the course are constants in all the units.

Teaching Procedures for the Course

Certain procedures emerge consistently in the presentation of the various units. Among these are: some studio work to give the nonart student an acquaintance with the "feel" of various media and some idea of their possibilities and limitations; the presentation of many and varied examples through slides, films, reproductions, and books; demonstrations of processes; lectures and discussions dealing with concepts or arising from class activities; and supervised research during which the student may refer not only to books but also to slides and the other visual materials. Individual viewers as well as slide, movie, and opaque projectors are part of the equipment of each art room.

There is variety in the way in which students show evidence of their understanding of the basic concepts involved in the course. These include: exhibits or charts based on unit concepts, illustrated reports, creative projects in art media for studio-oriented students, or class projects in which some of the ideas gained are presented visually to a larger school group.

The program allows for much variety in presentation; in general, it offers more than can be covered in a 10-week period. Teachers are free to select what seems most valuable for their classes. In two of the high schools, modified team teaching has occurred, with teachers of ceramics and of metal crafts alternating with the general art teacher in handling the units in which they are especially competent.

For field trips which involve the time of important artists, architects, or designers, two schools are usually scheduled for the same time. This allows for an inter-school exchange of ideas as well as for efficient use of the artists' time.

Teaching Aids for the Course

From the outset, it was planned to have a wealth of teaching aids available. This is essential to give the students broad contact with both the contemporary and historic worlds of art. Study of books, slides, reproductions, films, and actual materials are supplemented by field trips.

The organization of the course into four independent units makes possible the purchase of visual materials of higher quality and greater variety than those that could have been afforded if each school were supplied with visuals for all four units. These special sets of visual materials for each unit are rotated on a 10-week schedule among the schools; they are transported in heavy packing cases. Such an arrangement has possibilities for other large cities through a districting of the city or for small school districts through formation of a pool of first-class visual aids that are available to a number of districts. A basic art library remains in the art room of each school. Other books, films, slides, and prints circulate on a 10-week schedule among the four high schools.

A general statement of concepts to be developed, along with selected examples of content and methods used in each of the four units on Understanding the Arts, follows. A wealth of visual aids was used to illustrate and enrich the units.

UNIT I—PAINTING AND THE GRAPHIC ARTS

Concepts To Be Developed

1. Painting is not merely skillful reproduction of nature; each artist portrays what is for him truth and reality.
2. A painting is an organization of space, line, form, color, and texture; the work of art lives in and of itself.
3. The artist uses the tools, materials, and knowledge available; he explores the potential of materials, because the character of the material influences its use.
4. The artist is the sum of his personal experiences and of the culture in which he exists; he not merely records, interprets, and comments but also may anticipate or initiate changes in the culture.
5. A painting expresses feelings and ideas; the viewer must seek the artist's purpose.
6. Painting intended for some specific utilitarian function meets all the foregoing criteria plus

the special requirements of the use for which it is intended.

The films *Prehistoric Images* and *Art in the Western World* introduce the idea that man has always been an artist and that creativity is characteristic of the human animal. The artist, whatever his medium, expresses something of importance. Means used in the various creative arts—music, dance, writing—are demonstrated and discussed. The painter's means are presented through visual materials and clarified by laboratory experiences with different materials using line, form, space, color, and texture.

The development of the first concept, which is characteristic of the treatment of all six concepts in the Painting and Graphic Arts Unit, follows.

Paintings of different artists and periods present subjects in widely varying appearances. This raises basic questions such as the following: Why does the painter depart from surface appearance? Why do contemporary artists often work abstractly or nonobjectively? What is "truth" in a painting? What is "reality"? Are there as many realities and truths as there are ages or even artists? These questions are analyzed and discussed.

In contemporary art, new ideas and experiences influence the artist's expression. Speed, space, and the microcosm and macrocosm, primitive art, new materials such as plastics and extruded metals, X ray, stroboscopic photography, and psychoanalysis demand a new "realism."

Through slides, reproductions, and plates—along with readings and discussions—the class examines the treatment of several major subjects in painting (portraits, madonnas, landscape, and the circus) in a variety of ways by different artists. Discussion follows on the reasons for the variety of portrayals.

Portraits. Human vanity and the desire to preserve for posterity the memory of the loved, respected, or great have been responsible for portraiture—from Egyptian royalty, Assyrian war lords, and Roman emperors to the wealthy Dutch burgher or the twentieth-century bank president. Even the donors of altar pieces during the Renaissance had their portraits painted kneeling before the Holy Family, and frequently the artist cleverly tucked himself into a corner of the group. Paintings of Renaissance lords and ladies disguised as gods and goddesses were flatteringly true to their subjects, as were the silvery shepherdesses of eighteenth-century France.

The fine painter has accepted the challenge for a more-than-surface likeness; indeed, many artists have been interested in a kind of psychological portrait.

Madonnas. Mother and child, whether divine or earthly, is a continuing motif, especially in Western art. The medieval concept of impersonal Queen of Heaven was gradually changed through the centuries to that of warm, attractive, earthly mother. The deep love between mother and child and the fundamental nature of their relationship has always attracted artists.

Landscape. Landscape in Western painting first appeared as background for figures, not as subject matter in itself. But even in its use by Jan Van Eyck or Pieter Brueghel there is a delight in the scene. Later, as landscape became a subject in its own right, it was more personal: the homely farms of Rembrandt, the storm and turbulence of El Greco's "Toledo," the simple statement of form and light of Inness, the shimmer of Monet, the movement—almost the torment—of Van Gogh.

The Circus. Because of the action, color, light, dramatic contrasts, even tragedy, of circus life, it has, especially during the last century, become a subject of interest to painters.

Laboratory Experiences

Laboratory experiences with color include the following: mixing colors (powder paint, watercolor, gelatins, dyes, printer's ink, stained glass) to gain sensitivity to color changes; arranging color swatches to show differences of value, intensity, and hue; experimenting with colors placed on different color fields; noting effects of superimposing colored gelatins; studying colors as emotional stimuli; interpreting ideas or feelings by using color without recognizable form; or establishing a feeling of depth by the use of color swatches of advancing and receding colors.

An awareness of the element of line is developed in the following laboratory experiences: using directional lines only (chalk, ink, string, sticks) to create an impression of three-dimensional space without involving perspective; using line to divide, create, or negate space; attempting to interpret music by the use of line only. The element of line is also studied in conjunction with form; for example, students move a pencil or fountain pen without lifting it from the paper to create form based on the line movement.

The elements of form and texture are illuminated by laboratory experiences. These experiences include the following: using a flashlight or theatrical spotlight to demonstrate a change in the form of the lighted object; creating a variety of textures by use of paint, wax, or other painting material and by the use of extraneous matter; collecting objects having a variety of natural and man-made textures; and discovering man-made textures that are suggested by, but are not copies of, natural textures.

Having the students paint self-portraits as a laboratory experience is an excellent way of concluding the experiences in this unit.

Additional Experiences

Additional experiences in painting and the graphic arts are provided through field trips and talks by visiting artists. Visits are made by the students to exhibits such as "Artist of the Year," "Masters of the Last 100 Years," and "Art Nouveau." The students also visit the Art Rental Gallery (Pittsburgh Plan for Art) to select a painting for the classroom. A painter, a lithographer, and a studio art director visit the students and talk to them about their respective fields of art.

UNIT II—SCULPTURE AND CERAMICS

Concepts To Be Developed

1. Sculpture is universal.
2. Sculpture uses many materials.
3. Mass, space, line, color, and texture are elements in sculpture just as they are in painting.
4. The space in and around a piece of three-dimensional art is of vital importance to its over-all effectiveness.
5. The artist who works in three dimensions is no more bound by the literal appearance of an object than is a painter or a musician; rather he attempts to express truth as he sees and feels it.
6. Those three-dimensional objects whose primary function would seem to be use (ceramics) are art only insofar as they meet the criteria implicit in these concepts and are successfully functional.

A detailed development of the second concept gives a good idea of the way in which each concept in the Sculpture and Ceramics Unit is presented in the course.

The availability of material, the kind of work to be attempted, and the inherent nature of the material affect the finished sculpture.

Each sculptural material, by its very nature, has inherent advantages and limitations. But, today, the vast range of choices available to the sculptor from both traditional materials and new materials developed by our present culture has minimized the effect of these limitations. The contemporary sculptor has the additional advantages of increased knowledge of the artistic techniques of past cultures; greatly expanded technology, which has particularly increased his ability to work with metal in a variety of ways; and the stimulation of new concepts of space and motion.

Sculpture involves, basically, either building up or cutting away—and most materials are naturally conducive to either one or the other of these techniques. Occasionally a given material, such as clay or metal, may lend itself not only to cutting but also to building, and vice versa.

Through photographs, natural specimens, and artifacts made of various materials, the class studies the different uses and handling of a variety of materials in the execution of different artistic concepts. The class examines a variety of sculptures and discusses how the medium in which each work is done contributes to its effectiveness. The class studies the effect of the work of artists of other cultures on contemporary sculptors and also examines the effects on sculpture of new concepts of space and motion.

Stone. Different stones and rocks have their own proper, inherent beauty: a great variety of colors, grains, textures, and striations is to be found. And stone, of course, has a massive quality. In natural formations (of which color photographs are readily obtainable) a complex of the inherent beauty of stone can be seen—such a complex and massive beauty as artists often strive for in architectural sculpture.

The advantages of stone include its durability, even when exposed to weather, and its availability. The limitations of stone include its hardness, weight, and occasional brittleness.

Wood. There is also an inherent beauty in wood—in its color, grain, and texture. Age and weathering often lend depth and variation to these attributes.

The advantages of wood include the relative ease with which it can be cut; its grain, which can emphasize form; its variety of color; and its availability. The limitations of wood include its tendency to split and to deteriorate rapidly, and the preparation it requires to withstand weather.

Clay. The colors and textures of clay are inherent elements of beauty, to which are added its adaptability to a variety of practical uses and its cheapness.

The advantages of clay include its great plasticity; the ease with which it can be built up or altered, cut, or liquefied; its workable condition in its natural state, requiring no tools or only a few; and its durability when it is fired. The limitations of clay include its comparative fragility and the fact that the inherent weakness of the material limits the size of objects that can be made from it.

Metal. Metal is available in a variety of usable forms, such as sheet, wire, rod, and scrap. It can be cut, joined, and bent in many ways, and it offers variety in color and texture.

The advantages of metal include its hardness, durability, and imperviousness to weather. Its use is limited, however, by its lack of plasticity and by the fact that many tools and great technical knowledge and skill are required for the artist to use it effectively.

Laboratory Experiences

Laboratory experiences include the following: constructing nonrepresentational compositions of paper and toothpicks or wire in which space is a part of the design; making a "feelie" in clay or wood; imprinting textures on clay; selecting a bowl or other ceramic work for the home; evaluating the heroic sculpture proposed for a park; making a study of photographs of outdoor sculpture in Pittsburgh.

Additional Experiences

Field trips are made to a sculptor's studio to see sculpture in stone, cement, and metal; to a potter's studio; and to an exhibit by the Sculptors Guild. A sculptor who works in wood and metal, a craftsman in contemporary sculptured jewelry, and a ceramics sculptor visit the students and speak to them from personal knowledge and experience.

UNIT III—THE BUILDING ARTS

Concepts To Be Developed

1. Buildings are designed to satisfy human needs: for shelter, commerce, industry, assembly, government, and worship.
2. Architecture is an orderly organization of space to satisfy both physical and aesthetic needs.
3. The architect in determining the form of the building is influenced by its function, the topography, climate, socioeconomic conditions, and the materials available.
4. Any enrichment of a building must be an inseparable complement of the structure.

The unit on the Building Arts is introduced by the not recent but still challenging film, *The City,* made in the environs of Pittsburgh. Publications in connection with the bicentennial of Pittsburgh which point up the city's progress help students see how problems of city planning are currently being solved and what problems remain.

The concepts enumerated above for the Building Arts Unit are developed according to the following summary.

The building arts are a most important part of a larger complex, the community. The community has many needs that must be met—needs for good housing; recreational facilities; highways, roads, and bridges; parks and playgrounds; schools and libraries. And, as all these needs are met, the community must be protected against fire and against hazards to health and physical safety.

The many problems raised by community living are discussed by the class. The class compares the ways in which Pittsburgh now meets these needs with the ways in which they were met 25 years ago.

Certain basic needs of human beings continue—of human beings both as members of a community and as individuals—but different cultures interpret and fulfill these needs in different ways: structures of different periods that have essentially the same function are sometimes built in such different ways that their common purpose is not immediately evident. Advances in knowledge that result in new materials and new methods of construction also result in significant changes in the building arts from period to period. Scientific and technological advances have made possible concrete block, reinforced concrete, laminated plastics and woods, and metal and aluminum alloys—all of which, in turn, have brought a "new look" to the architecture of today. The introduction of steel in building, cantilever construction, and scientific use of "tensegrity" have caused a revolution in the building arts.

The class compares buildings of different cultures which were intended to fulfill essentially the same purpose. The class also studies technical developments in the building arts, culminating in Fuller's light but strong geodesic dome.

Community Structures. The New England community's "Town Commons" (as shown in the film *The City*) is similar to the Roman Forum in that both served the need for a place to meet and do business; but they are different in numerous respects because the nature of the meetings and business in New England and in

Rome were different. A medieval walled city, Carcassonne, and a Colonial fortified settlement, Fort Pitt, are alike in that both were constructed primarily to protect their citizens from armed attack; but they also are different. The medieval tower wall is different from the present-day system for warning and protection, the "D.E.W. Line."

Individual Buildings. A Japanese home, an adobe Indian hut, a modern home designed by Frank Lloyd Wright, and a contemporary apartment all meet the need of people for shelter in a different way. The Parthenon, Chartres Cathedral, the Temple of Amon Ra, and a twentieth-century university chapel differ not only because of the differing physical requirements and building techniques of the different times in which they were built but also because of the differing religious attitudes and psychological needs that they were designed to satisfy. The Colosseum in Rome, the Hollywood Bowl, and the new Pittsburgh Arena show how different functional requirements dictate different use of building materials. The Museum of Modern Art, the Guggenheim Museum, and the Carnegie Museum show the differing ways in which form contributes to function.

Laboratory Experiences

Laboratory experiences include the following: laying out a floor plan that meets the needs of student and family, collecting building materials and pictures of building materials available for today's home, finding pictures that illustrate new uses of old materials, mounting pictures that show how human needs of today have influenced building, studying a new hospital or school plant for good use of materials and for functional form, and listing the planning and building problems existing in the community and suggesting ideas for solving them.

Additional Experiences

Visits and talks by a designer of stained glass, an architect, and a designer of ecclesiastical art proved to be enriching experiences for the students. They also profit by field trips to a contemporary home designed by a local architect; to local points of interest such as the Gateway Center, the Pittsburgh Courthouse (designed by H. H. Richardson), the Pittsburgh Arena, and the Oakland Civic Center. The students see models of a suggested downtown market area and of contemporary churches at the Carnegie Institute of Technology School of Architecture and also visit the Hunt Stained Glass Studio.

UNIT IV—INDUSTRIAL DESIGN AND CRAFTS

Concepts To Be Developed

1. The form of the article should make clear its use, and it should function well in doing what it was designed to do.
2. The form of the article must be the result of the unified organization of all its functioning parts.
3. Well-designed products require an honest and effective use of materials and methods of manufacture which are suited to the nature and possibilities of the materials.
4. The texture, color, and form of articles for daily use should be pleasing, and materials should be used in such a way as to take advantage of their natural beauty. Any enrichment should be harmonious with the basic form.
5. The finest product will bear the unmistakable artistry of the individual designer.

The film *Seven Guideposts to Good Design* is a natural introduction. It is followed by class development of criteria to be applied to objects designed for use, whether produced by hand or by machine.

There are many categories of articles designed for use, such as tools and utensils, containers, lighting fixtures and appliances, textiles, furniture, and conveyances. Development of the concepts of this unit as applied to the design and making of furniture is illustrated by the following discussion.

Furniture. In both the home and in public places furniture serves as a place to rest and provides work space and storage space; recently some pieces of furniture have come to serve a secondary function as room dividers.

Basic designs in furniture have changed little with time. The changes that have taken place have been the results of discovery of new materials and processes of manufacture or differences in custom and tradition. Different pieces of chair-type furniture in Egypt, Pompeii, on a crusade, in a Venetian palace, in an American farmhouse, and on a twentieth-century patio are equally functional.

The students discuss furniture in the light of the implied criteria of the basic concepts of the unit. They discuss old ideas and new-old ideas in furniture; the changes that have been brought about in furniture as a result of television; and traditional materials and combinations of materials that are used in furniture and the types of furniture in which they are most effective. The students also consider whether twentieth-century pieces represent an improvement over earlier designs.

Wood is the most common traditional material from which furniture is made; modern science, however, has developed many new materials from which furniture can appropriately be made, or which can be combined with wood or other traditional materials. Method of manufacture, whether handcraft or machine, is an additional factor that determines the form of a piece of furniture, and each technique has its own distinctive merits.

Laboratory Experiences

Laboratory experiences for the unit on industrial design and crafts include the following: making collections of woods and other materials used in furniture; charting the life history of a chair, a lamp, or an automobile; arranging and presenting a display of well-designed articles that sell for less than $1; selecting from advertisements tableware, lamps, pocketbooks, tools, appliances, or automobiles, and justifying the choice; and presenting to a parent-teacher association or school assembly a talk featuring examples which illustrate each of the *Seven Guideposts to Good Design.*

Other Experiences

Field trips are taken to an "Art Nouveau" exhibit, to a showing of Pompeian bronzes, to the "Craftsman's and Weaver's Guide Show," to a glass exhibit, and to a studio showing good contemporary furniture and textiles. The students also hear lectures by an industrial designer, a craftsman, and a weaver.

CHAPTER VIII

Related Arts Program in Hillsdale

The following account of a related arts program at the Pascack Valley Regional High School, Hillsdale, New Jersey, is included as an example of a successful educational venture in relating the arts at the secondary-school level. While not specifically designed as a program for academically talented students, it is, nevertheless, being carried out in a situation where there is considerable homogeneity in the student body and where the intellectual level is higher than usual for secondary-school students. It is, therefore, a type of program well suited for academically talented groups.

The related arts course combines the areas of art, homemaking, industrial arts, and music in a single program. It is not the intention of this program to make artists, musicians, industrial artists, and home economists out of the students. Rather, its obligation is to make opportunities possible for creative experiences in the four areas, while at the same time developing an understanding of the many exciting relationships which exist among them. In addition to making creative experiences in the arts available, it also helps young people in their total behavioral growth and development.

OBJECTIVES OF THE PROGRAM

The following major objectives of the related arts program have been formulated:

- To provide opportunities for creative involvement in the areas of art, homemaking, industrial arts, and music

- To develop enjoyment in and appreciation of the arts through experiences involving the senses
- To acquire necessary skills and understanding to achieve success in individual undertakings
- To guide exploration in the program in terms of future vocational and/or avocational needs
- To promote a creative attitude and behavior toward problems
- To help pupils select wisely, use properly, and care for the things they will buy
- To enrich the cultural growth of students and society by developing an awareness of relationships among the arts
- To discover and encourage individual students who possess special abilities in one or more of the arts.

OPERATION OF THE PROGRAM

All ninth-grade students in the four-year senior high school are required to enroll in the related arts program. Students receive two and one-half credit points for the course.

The staff consists of nine people: two each in art, homemaking, industrial arts, and music, plus a coordinator who has the chief responsibility for the development and evaluation of the program and for such administrative tasks as scheduling, ordering materials, and reporting. The staff members are highly competent in their specific areas, and each has a particular interest in one of the other areas. They are willing to experiment without fear of failure.

In a school day of eight periods, two have been assigned to related arts in each of the four areas involved. At the time of this writing, 264 students comprise the ninth grade. These students have been divided arbitrarily into two groups—one scheduled for related arts during the third period; the other, during the seventh period. This is the extent of the involvement of the administration in scheduling the students for this program. The Related Arts Department assumes the responsibility from this point.

During each period, therefore, 132 ninth-graders are scheduled for related arts. Each group is further divided in two and appropriately designated. There is, therefore, a student-teacher ratio in related arts of 16 or 17 to 1—a very desirable class size. The movement of the students through the program is based on a rotating schedule *throughout the year.*

As a general rule, each cycle involves eight days of school. For example, one A section is scheduled in the art studio on Monday and Tuesday; on Wednesday and Thursday, in the music studios; on Friday and the following Monday, in the industrial arts shops; and on Tuesday and Wednesday, in the homemaking suite. There is, at the same time, another A group moving in the same pattern. While the A groups are in the art area, the B groups are in the music studios, the C groups are in the shops, and the D groups are in the homemaking suite.

The scheduling, however, is not rigidly followed. At any time the students in all four sections can be called together for sessions which will be explained below. Depending on the nature of the class endeavors, the cycle can be made to encompass 12 or 16 days or longer. Individual students may remain in particular classes to complete experiences if this appears to be necessary. Several cycles are generally devoted to each major topic of the course.

CONTENT OF THE PROGRAM

At present, the areas of art, homemaking, industrial arts, and music form the basis for the program. Speech and drama and creative writing are included from time to time, and it is hoped that these fields will be incorporated into the basic course structure in the future.

Concepts Around Which the Program Is Built

The most fruitful basis thus far discovered for relating experiences in the four fields has been to utilize factors which occur in all the arts, such as the elements of *line, color, shape, texture,* and *space,* and the concepts of *mood* and *function.* Each of these, as well as others which have been used, has been so organized that experiences illuminate the relatedness among the arts and contribute to understanding and personal development in each of the areas of the program.

As an example of the way in which the course is organized and conducted, the planning and activities developed around the element of *line* will be described. There was first a series of general sessions attended by all the groups and devoted to a presentation and discussion of line—its definition, its importance, its varied employment in the arts. This was accomplished through team teaching, with each teacher contributing ideas, concepts, and materials from his specific field as the varied use and meaning of line were illustrated. The various sections then began their rotating schedule. Activities within each of the four fields had been carefully planned. A vocabulary was developed so that key words were used by each teacher to intensify the meaning of line and identify the relationships which exist. In each area of the program, the teacher further oriented the students to line—its values intrinsic to the specific area under study and its values related to the other areas. All sections did not (and rarely do) have the same experiences with the same materials and tools, for the staff members tried out different approaches and activities. However, the same general learnings which the staff had established were kept in mind at all times.

One section in art used clay as a medium with which to work. The students handled it in various ways. Clay was rolled by some students into long coils and used as a linear medium in building pottery—an ancient method. Others incised lines directly on the clay or built up lines in relief. Many types of lines were created—rhythmic, geometric, and static. At the same time, each student learned much about clay—that it shrinks, breaks easily, can be carved and rolled; that it changes color after firing and can be glazed. All of this, of course, was learned while they were developing the concept of line and its varied meanings and uses.

During a period of seven weeks, this same group was having experiences in music classes with line. In music, line was largely defined as melody. What is melodic line? How do we discover line in music? How can we sing a line? How can we play a line? Students had opportunities to sing, play instruments, and listen to various kinds of melody and its development.

In industrial arts, the students worked with wire, strips of metal, wooden reeds, dowels, and other materials. Using these materials in a linear fashion, they made sculptural constructions that were both varied and ingenious. They also had occasion to utilize many of the industrial arts processes such as gluing, sawing, cutting, soldering, drilling, and sanding, and became familiar with the qualities of a number of materials.

In homemaking, students worked with fabrics in designing and constructing garments. Line as it relates to the human figure and to the construction and fabrication of clothing was stressed in these experiences.

At the end of the time devoted to the element of line, students had realized many different kinds of experience with it. They had developed some skills, had enriched their vocabularies, and, most important, had discovered that line has manifestations in all the four areas of the program.

Experiences Commonly Included in the Four Areas

The experiences, insofar as possible, are broad and permit personal variation, and there is considerable freedom in the choice of materials and tools which a student utilizes in his activities. Experimentation without fear of failure, de-emphasis of those experiences which are closely allied with extrinsic motivation only, and emphasis on direct experience with materials help to establish those areas in which the staff wishes students to have creative and related experiences.

A great variety of activities is engaged in. Boys and girls cook, sew, plan meals and budgets, decorate rooms, and arrange flowers, as well as have many other experiences in homemaking. In music, they play instruments, sing, compose music, write lyrics, learn to read music, listen, and dance. Students work with clay, paint, enamel, metals, fabrics; experience the graphics; sculpt; work with photography; make scenery; and design with a variety of materials in the art studios. Working with wood, metal, plastics, and leather, students learn to design, use mass production approaches, and handle tools in the industrial arts shops.

Some activities may involve a student for a single period; others may take weeks. Skills and understanding are a part of the training and are taught when the students find specific use or need for them. The students understand that there are things they must know in order to plan and create. However, they are also aware that understanding the concepts which form the basis of the program is also necessary in helping them to become creative.

During the last six weeks of the school year, the students may elect to work intensively in any one of the four areas. This provides opportunities for experiences of some depth in an area of special interest. Their interests may lead them into greater experimentation with materials, further exploration of a particular area or medium, or development of greater proficiency in a given area. With guidance, the students set their programs and pace. At the conclusion of the six-week period, there are evaluations of experiences.

Because the staff believes that the program has great implications for the growth of the student in all areas of the total school program, there are many other things which are part of the course. These include: stating problems clearly, setting up and testing hypotheses, selecting materials, and evaluating both process and product. In particular, the staff helps the student to develop his imagination and to express himself creatively, to work at times as an individual and at others as part of the group, and to understand the points of view of others. Of course, teachers of many subjects will insist that these are done constantly in their classes and the staff acknowledges that it has no monopoly on this area of behavioral growth and change. However, the related arts teachers have found that the nature of the program provides the opportunity to work extensively with young people on these general but essential outcomes.

METHODS OF TEACHING

Orientation to Concept Areas

As the year progresses and instruction moves from one concept area to another, the staff has found that well-planned orientation sessions for the students are important in helping to establish the relationships which exist among the areas.

Methods of scheduling permit meetings of one half of the freshman class at one time, and the auditorium is located in an area which is central to all of the studios and shops. Various methods of orientation are successful. Films such as *Design in Motion, Elements of Design,* and *Dancing Fleece* have often been employed as a starting point, followed by discussion with the students. The fact that films use the arts of both time and space makes them especially useful. The staff has frequently served as an informal panel, showing by illustration and discussion the various and important relationships implicit in the new topic. Student panels, formal demonstrations, and exhibits of professional and student work have been employed at various times both to initiate a new concept area out of which will grow the variety of creative experiences in each of the areas of the related arts program or to illuminate or clarify some points implicit in the activities of the various groups. In addition, each teacher has various approaches in introducing the students to specific experiences, for example, going on trips and using films and slides.

Specific Areas

Perhaps the most interesting method utilized is that of team teaching. Within the four areas of the program, the staff often combines the two sections that meet simultaneously into one area. In this way, teaching abilities can be pooled, students can observe and participate in a wider variety of activities than when the sections meet separately, and discussions and demonstrations can be made more effective.

Just as frequently, these combined meetings can cut across subject lines. It is just as easy, and often just as necessary, for a section which is meeting in the art studio to combine with a section in the industrial arts shops. Thus, a teacher of art and a teacher of industrial arts can be working together if this seems important and valid for the specific experience. The coordinator is able to free any teacher so that he can work with a section meeting in a different area, and, also, the coordinator can himself team teach in any of the various sections. This permits a considerable amount of interchange among the four areas. The staff feels that this not only helps students to develop a better understanding of the relationships among the areas but is also of great value to the staff. It is not only a teaching experience; it is a learning experience for them as well.

In addition to methods of better utilization of personnel, diversity of activities within areas is important. It would be impossible, for instance, for every student to learn to operate the potter's wheel, and there are some who may not wish to do so. However, if there is a variety of activities in operation, students have an opportunity to observe other experiences than the ones they are engaged in. Such observation does not replace actual experiences with materials, but it is certainly valid in developing awareness. All students need not do all things. However, the staff members believe that they must discover and promote those experiences which are important in the creative development of each student.

In line with the stated objectives, the staff frequently utilizes group process in teaching methods, which is often necessary when a variety of experiences are going on at the same time. The students, of course, are helped in developing initiative, in working as creative individuals within a group, in sharing supplies and equipment, in observing the approaches of other students, and in informal evaluation which constantly occurs within a group. Depending on the type of experience which the students are to have, the staff can develop the specific teaching method best suited to it. Although the "monitorial" method has certain disadvantages, there are times when a student can do a better job of teaching than the teacher. There is no one method suited to all situations, and both the teachers and the program remain elastic enough to adopt any method which seems right for the situation.

Most pertinent, however, is that the major emphasis in the program is on active participation in all areas. The lecture-assignment-recite-and-test method is not used. Lectures may be used on occasion, but the emphasis is on a studio approach whereby students have direct involvement with media. Passive participation is kept to a minimum.

Resources are extremely important. The most important resource is the teachers' representing, as they do, the four specific arts areas. Significantly, staff members from other areas such as mathematics, English, science, and social studies have become increasingly willing to offer their services as resource people, and use has been made of their services. Professional people in the various fields have been utilized, and, naturally, extensive use is made of films, books, recordings, slides, visits (the school bus facilitates taking trips), etc.

Evaluation

Perhaps the most difficult part of the program, as anyone in the creative arts fields can testify, is the evaluation of student growth. Letter grades are used in the Pascack Valley Regional High School, and the related arts program works within this framework.

Evaluation of student progress is based on behavioral growth and change. Many aspects of the behavior of the student in the program need to be considered: attitude toward the program, interest in the work, resourcefulness, evidence of growth, relation of activities to other interests. Proficiency in skills, outstanding end products, and understanding of processes, although important, are not enough.

The staff has developed basic criteria which act as a guide in evaluation. They are as follows:

- Growth in the use of materials, tools, and equipment

- Originality and imagination as evidenced in classwork
- Effective use of information learned
- Evidence of understanding basic concepts
- Willingness to experiment with new ideas and materials
- Demonstration of resourcefulness and initiative
- Excellence of work habits such as reliability, promptness, neatness
- Care of school property
- Ability to plan thoroughly and to implement plans
- Ability to transfer learnings from one area to another
- Attempts to improve personal standards of achievement.

These are not listed in order of importance. Often it is necessary to develop additional criteria to evaluate specific experiences successfully. On the other hand, the staff may be unable to evaluate each student on all these criteria in each area for every experience. In general, however, there is less concern for technical proficiency than for growth in understanding of basic ideas and for the development of creativity in the various areas.

Many approaches have been tried in evaluating student growth. The attempt has been made to evaluate student work by using written and verbal comments (omitting letter grades) on pieces of work or on completed experiences. Group evaluation by open discussion, completed questionnaires, written evaluations, exhibits of completed work (either of groups or individuals), discussion of the methods used during an activity, and appraisal of the way the class or group worked are other approaches that have been utilized. The staff learned, for example, that the students wanted more direction than they were given during a Christmas project.

Encouragingly, students are tending to be less concerned with the grades they receive than with the meaning of the experience for them. This is a slow weaning process, however. Of course, individualized evaluation on the part of the teachers is extensively used through conferences, reports and records, and staff discussion. The teachers attempt to discover problems which are preventing students from having success. It may be the group, the teacher, the methods, the background. All of these are important in any kind of an evaluation. It should be understood that the finished product is not eliminated from the evaluation picture. Students at this age are concerned with the finished product; it is greatly important to them and should meet certain standards—standards which the students themselves must help to establish. However, the finished product is only one of the components in evaluating each individual child.

Special Programs

During a given series of class sessions, it is often important to bring the students together from time to time for discussions, films and slide showings, concerts, guest performances, demonstrations, etc. This helps to keep in clear focus the concept or concepts being currently evidenced, and makes it possible for the students to be with other members of the program who are not in their sections.

Often, it is possible to break up the sections for a period of time. Recently, a program for Christmas was written and staged. The students elected the working committees on which they wished to serve and met in the same place each day for a period of time. There were committees on sets, costumes, props, lighting, acting, writing, programs, etc. Each staff member worked with a committee. The result was a highly successful production in which all members of the entire class were involved in one way or another.

Special exhibits of student work, programs for the community, and small group visits to other areas of the program—all aid the staff in enriching the course and in doing a better job of relating the areas of experience.

The staff is constantly aware that it must develop new methods of teaching to meet different situations. What may work one year with a group may be unsuited to a different group the following year. Careful planning, intensive orientation of the staff and the students to the specific concepts, team teaching, and a careful blending of group and teacher evaluation are methods which work well most of the time. Each teacher has, of course, his own specific methods which he employs.

STAFF ACTIVITIES RELATED TO THE PROGRAM

With any program which is in the process of evolution, the demands on the staff are great, both in time and energy. There is no question that the development of the related arts program has been a definite learning experience for the personnel involved. The development of new methods, constant evaluation, team teaching, discovery of new relationships, and the atmosphere of exploration and experimentation have brought about a high degree of creativity and professionalism on the part of the teachers. Of course, it was this same creativity and professionalism which made it possible to implement the program in the beginning.

Planning sessions for new concept areas may extend over a period of a few or many days. These sessions involve defining the concept, establishing special objectives, determining likely activities, setting tentative time schedules, and assigning personnel to special responsibilities. In addition, the orientation programs must be completely planned because they initiate the activities concerned with the new concept.

Planning sessions are held not only at the beginning of a new concept experience, but continue throughout the class time devoted to it. In this way special programs as mentioned earlier can be planned; the time schedule can be changed, if necessary; needed modifications in content and activity can be made; and concluding programs can be planned.

It is often important for the staff to have "open-end" discussions on basic philosophy, on ideas, and on psychological implications without worrying about such things as time schedules or whether something will work. These discussions contribute greatly to professional growth and understanding.

Other basic activities include the following: visits by staff members to other areas of the program; visits to other schools; a brief report by each staff member at staff meetings on the activities and experiences being undertaken in his classroom; reading pertinent articles from periodicals, books, and bibliographies which are circulated throughout the Department; and meeting with professional consultants in the four areas.

The staff is a busy one. The members are also deeply involved in demands from other segments of the total school program—designing sets and building booths; making signs and posters; furnishing music for various programs; directing marching bands, choirs, and orchestras; and so on, *ad infinitum*.

In addition, members of the related arts staff are creatively and professionally involved in their specific areas as painters, designers, dressmakers, choir directors, composers, singers, speakers, consultants. They also teach elective courses in their specific areas of specialization.

Significantly, it appears that involvement in a program which helps to bring creative experiences to all students in a meaningful way helps to develop and maintain a high degree of enthusiasm in professionally minded staff members.

THE RELATED ARTS PROGRAM IN RELATION TO THE TOTAL SCHOOL PROGRAM

Because every ninth-grade student is required to enroll in the related arts course and because it is taught by a team, the related arts staff is unique in the school in knowing the ninth grade as a whole. It is thus in a position to establish and nurture desirable behavior patterns from which the entire school will benefit.

To date, it would appear that the creative experiences provided in this program enhance learning in social studies, English, and mathematics. At present, there has been no opportunity to evaluate the creative experiences as they relate themselves to ninth-grade language and science programs.

Stimulated probably by interest in the related arts experiences, students have chosen to elect courses in the various related arts areas as part of their four-year program in much greater numbers than previously. The number of classes in the four areas has increased during the last four years from one to 11. The elective courses in the arts reflect the methodology characteristic of the related arts program because the same teachers are involved. There is heavy emphasis on experimentation and on the relation of activities to other arts. There is, of course, much greater opportunity for development in depth in the special area of each elective course.

It is possible that this approach may be developed for students in the upper grades as well—a related arts course for seniors. The staff is eager to add speech and drama, English, and dance to the program.

CONCLUSION

A course relating the four arts will continuously pose problems, for the needs of each student raise new questions which challenge the teacher. It has, however, been demonstrated that such a program can be effectively scheduled and provided on a limited budget. It is also possible to conduct it in a physical plant which was not specifically designed for it. The most important ingredients are a willing and interested professional staff, a sensitive administration, and an understanding board of education.

At a time when public attention is less specifically focused on the arts, a program such as this provides the vitally important balance needed for the development of our young people.

Through constant evaluation of objectives and methods, constant questioning and discussion of new ideas, the related arts staff hopes to keep the program alive. It may remain much as it is now, or it may change drastically. It is possible, too, that its present form has meaning only for Pascack Valley. But, whatever the pattern of its development, the students are being involved in rich and meaningful experiences and the staff members are better, more capable teachers because of it.

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